

Land off Bedford Road, Roxton

Representations in Respect of Landscape, Ecological, Heritage and Arboricultural Circumstances

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On behalf of: Rainier Developments Limited

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(edp6100\_d006b 13 August 2020 GY/JW)

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# Section 1 Introduction and Key Conclusions

- 1.1 Rainier Developments Limited have appointed the Environmental Dimension Partnership Ltd (EDP) to undertake a series of preliminary environmental appraisals on a site known as Land off Bedford Road, Roxton. The location and boundaries of the site are illustrated on **Plan EDP 1**.
- 1.2 EDP is an independent environmental consultancy providing advice to landowner and property development clients in the public and private sectors, in the fields of landscape, ecology, heritage, arboriculture and masterplanning. EDP is a Registered Practice of the Landscape Institute and a Corporate Member of IEMA. The Practice operates throughout the UK from offices in Cirencester, Cheltenham, Cardiff and Shrewsbury. Details of the Practice can be obtained at www.edp-uk.co.uk.
- 1.3 To date, the purpose of EDP's work has been to gain an early understanding of the environmental issues likely to affect the site's 'in principle' suitability for development and its potential capacity. To this end, the following specific work items have been undertaken:
  - Data trawl of relevant landscape designations and considerations and assessment of the site's character and zone of primary visibility;
  - Data trawl of relevant heritage designations and assessment;
  - Data trawl of relevant local ecological designations and extended Phase 1 habitat assessment; and
  - Preliminary Arboricultural assessment including a walkover survey.
- 1.4 The site sits on the northern edge of Roxton, to the south-east of Bedford Road. The site comprises two plots, which are currently in agricultural use. The two plots are referred to as Parcel A (to the north) and Parcel B (to the south) within this document. The site context is illustrated in **Image EDP 1.1**.



Image EDP 1.1: Aerial view of the site. Source: Google Map data 2021.

# **Key Conclusions of EDP's Assessments to Date**

1.5 EDP has not found any 'in principle' issue, which would preclude the site's allocation for built development; indeed, it is not especially constrained in environmental terms.

#### **Landscape Matters**

- 1.6 Due primarily to the enclosure created by existing landscape features within the local context and intervisibility with existing built form, the site has a reduced landscape sensitivity.
- 1.7 Both parcels are barely perceptible from the wider setting and has well-established urbanising influences in close proximity to it, being well contained by both existing built form and mature landscape features. It is likely that the majority of landscape and visual effects resulting from proposed development within the site would be limited to receptors in close proximity to them.
- 1.8 The development of the site provides an opportunity to enhance and augment the remaining landscape features across the site and along its boundaries. Further, landscaping measures included within the promoted development would be able to provide targeted mitigation where necessary, which would also be effective at promoting biodiversity gains, particularly within that part of the site.

1.9 In the interests of good masterplanning, due to possibility of views of taller built form within the site from the wider context, attention should be given to the boundary treatment and development extents within Parcel A.

#### **Ecological Matters**

- 1.10 Based on the findings of EDP's Preliminary Ecological Appraisal, the designated sites, habitats and species potentially present within and around the site do not pose an 'in principle' constraint to development of either Parcel A or B.
- 1.11 Both parcels are relatively unconstrained ecologically, comprising predominantly poor semi-improved grassland habitat of negligible ecological value. No statutory or nonstatutory designated sites are considered to be at risk of any material and adverse effects as a result of the proposed development.
- 1.12 The habitats present on the parcels are generally of moderate to low intrinsic ecological value, and given the small size of the site, it is considered that development of the site would have a minimal effect on local biodiversity. Some habitats considered of local level value are present but subject to appropriate masterplan design, in accordance with the design principles outlined above, adverse effects upon these habitats can be readily avoided, mitigated or compensated for and no net loss to biodiversity achieved.
- 1.13 A number of detailed baseline protected species surveys will be required to accompany any planning application for the site, together with an assessment of potential effects and strategies to avoid, mitigate or compensate for such effects. However, it is considered that through the adoption of industry standard impact avoidance and mitigation measures, any adverse effects on protected species can be appropriately addressed to ensure no net loss to biodiversity, in accordance with national planning policy.

#### **Heritage Matters**

- 1.14 With regard designated heritage assets, it is considered that the Parcel A makes a very limited contribution to the significance of the Grade II\* listed Parish Church of St Mary Magdalen, a very limited contribution to the significance of the Grade II listed College Farmhouse and a very limited contribution to the significance of Roxton Conservation Area.
- 1.15 Parcel B makes a limited contribution to the significance of College Farmhouse and Roxton Conservation Area.
- 1.16 As such, these designated heritage assets would need to be carefully considered in any future masterplanning exercise in order to minimise or avoid harm to their significance. In some instances, such as the visual link to the church tower along the footpath within the north of the site, retention of the footpath and careful landscaping could minimise, if not altogether avoid, any potential harm to the church's significance.
- 1.17 Given that the contributions of the site to the significance of these assets are limited or very limited, there is no current reason to believe that these are such overwhelming

- considerations that they should preclude the overall deliverability of the sites, or markedly curtail their capacity.
- 1.18 With regard non-designated heritage assets, both parcels are considered to have a low potential to contain archaeological remains that would influence their deliverability or capacity.

#### **Arboricultural Matters**

- 1.19 Of the items surveyed, 2 have been identified as Category A, of high quality and value and 24 have been identified as Category B, of moderate quality and value. These items should be prioritised for retention due to their condition, age and retention span.
- 1.20 All of the surveyed items are located around the perimeter of the site (or internal field parcels) and, providing that designated root protection areas (RPA) and canopies are respected, they do not adversely constrain the potential to accommodate residential development in the main body of the site, with the exception of a proposed access from Bedford Road/High Street.

#### **Overall Conclusion**

- 1.21 For the above reasons, EDP's overall conclusion at this stage is that the site is eminently suited to accommodate some development to help meet the Council's housing need and is capable of being developed in accordance with relevant environmental policy at local and national levels.
- 1.22 Further detail of EDP's desk and field assessments can be found on the following pages.

# Section 2 Landscape and Visual Matters

2.1 Following desk-based analysis of local landscape-related planning policy, designations and character, a site appraisal was undertaken, by an experienced Landscape Architect. This involved walking and driving the local area to understand the character of the site and context and to assess the likely landscape and visual effects that would arise from development of the site.

#### **Landscape-related Designations**

- 2.2 There are no national or local landscape designations located within the broad study area.
- 2.3 Landscape related designations and policy considerations within 5km of the site are shown on **Plan EDP 2**. In summary:
  - Parcel B as being subject to the 'saved' Village Open Space policy;
  - The site is not subject to any local or national landscape designations;
  - There are two blocks of Ancient Woodland within the broad 5km study area, with the closest located 2km to the west of the site boundary;
  - There are a number of woodland blocks within the broad 5km study area;
  - Both site parcels contain small portions of the Roxton Conservation Area;
  - There are a number of listed buildings within Roxton and a number of scheduled monuments within the wider 5k study area;
  - There are a number of public rights of way (PRoW) within the broad 5km study area, providing access to and from settlements and farmsteads. There is a PRoW that runs north-south through the eastern portion of the site; and
  - One National Cycle Route, running between Bedford and St Neots, runs along Bedford Road, to the west of site.

# **Other Relevant Considerations**

# **Heritage Matters**

2.4 While heritage assets are not landscape designations, they do, on occasion, serve to influence the character of the landscape and can inform landscape value, which are

considerations within this report. Where this is the case, it is noted in the relevant assessment:

- There is one conservation area located within the detailed study area, Roxton Conservation Area, which is located adjacent and partly within the site within Roxton Village;
- Numerous listed buildings are located within the 5km broad study area, most of which are clustered within the conservation area or centrally within urban areas; and
- The Grade II\* listed Parish Church of St Mary Magdalen is located on the eastern side of the Village.
- 2.5 Taking these matters into consideration, the value of the site in landscape terms is slightly elevated by heritage considerations.

#### **Ecology Matters**

- 2.6 While these are not landscape designations, as for the above referenced heritage assets, they do, on occasion, serve to influence the character of the landscape and can inform landscape value. Where this is the case, it is noted in the relevant assessment.
- 2.7 In terms of nature conservation interest, Parcel A comprises of two fields of semi-improved grassland. The site is divided by a species rich hedgerow that contains two mature oak trees. The northern field contains a pond with steep sloping sides that is surrounded by scrub and tall ruderal vegetation.
- 2.8 Within the south of the site is a small patch of arable land, which has been used for growing vegetables. In the south-west corner of the site is an apple orchard. There is a large barn building with a metal exterior and an asbestos roof that is considered to be of negligible potential for roosting bats.
- 2.9 Along the boundaries are areas of tall ruderal that would be suitable for reptile species.
- 2.10 Parcel B is comprised of a single field of species-poor semi-improved grassland. There is a strip of tall ruderal vegetation within the field and a patch of dense bramble scrub. The site contains a pond with very steep edges. The pond is surrounded by thick scrub and tall ruderal vegetation. There is a mature sycamore tree within the field that is of moderate potential for roosting bats.
- 2.11 The northern edge of the site that borders Bedford Road consists of a line of mature trees. The field margins contain areas of tall ruderal vegetation. There is a species poor hedgerow on the west of Parcel A.
- 2.12 There is a single storey building in the east of Parcel A. The exterior walls are tiled and the building is of low potential for roosting bats.

#### **Tree Preservation Orders and Ancient Woodland**

- 2.13 There are 12 trees with individual tree preservation orders (TPOs) within the village, but none are located in, or adjacent to the site. There is a group TPO covering trees within Roxton Park to the south, and some other pockets of trees around the village, none of which are located within, or adjacent to the site.
- 2.14 There is no Ancient Woodland within the site itself, whilst Palace Yard Wood, which is located 2.5km to the west of the site, is the nearest designated Ancient Woodland.

#### **Public Rights of Way**

- 2.15 PRoW falling within the Zone of Primary Visibility (ZPV) generally provide links between local settlements in the area and do not obviously form parts of longer routes. Potential views from these PRoW, and others within the wider context, will be considered as part of the baseline visual assessment.
- 2.16 PRoW no.5, set out on the Bedford Borough Council definitive map, is a local long distance route called the Ouse Valley Way, running north–south, through the eastern half of Parcel A of the site, locally connecting Bedford Road to the north with School Lane to the south.
- 2.17 PRoW no. A2, also forms part of the Ouse Valley Way, running south from School Lane, to Ford Lane on the southern edge of the Village, with the Ouse Valley Way diverting east towards the River Great Ouse, along PRoW no. A3, which runs to the south and east of Roxton Village.
- 2.18 PRoW no. A3, part of the Ouse Valley Way, diverges mid-way down PRoW no. A2, and runs east to meet the river Great Ouse, before running south to meet the end of Ford Lane, which terminates near the river.
- 2.19 Part of the National Cycle Network (Sustrans Route 12), running between Bedford and St Neots, runs along the side of Bedford Road, to the west of the site.

# **Open Access Land and Country Parks**

2.20 There is no Open Access Land or Country Park designations within 5km of the site.

#### **Landscape Character**

#### **EDP's Assessment**

2.21 Parcel A is bounded on the north by Bedford Road, and part of an adjacent arable field, which wraps round the north-east corner, and down the full length of the eastern boundary. The southern end of the site is bounded partly by another smaller arable field to the south, and residential properties on Roxton High Street. The High Street then wraps up and around the western side of the site to meet Bedford Road.



**Image EDP 2.1**: The site in its current form, taken from Parcel A looking north towards Bedford Road.

- 2.22 There is no enclosure to the northern boundary, and views to Bedford Road are only interrupted by small patches of scrub on the land to the north between the site boundary and the road. There is also no enclosure down the eastern boundary, with the site open to the arable field to the east, save for a couple of small trees scattered along its length.
- 2.23 The southern boundary is contained by a native hedgerow on its eastern end, about 3m in height, with a slightly gappy base, and by rear garden boundaries associated with the Grade II listed College Farmhouse, consisting of closed board fences and rough kept hedges towards its western end, running behind the agricultural barn.



**Image EDP 2.2**: The site in its current form, taken from Parcel B looking south towards Roxton.

2.24 The Western boundary is contained by a native hedgerow, which is low (less than 2m high) and gappy, showing signs of poor management and constant flail cutting at the same height. The high street to immediately adjacent to this boundary is slightly elevated affording clear views over the hedgerow into the site, and onto the wider landscape beyond.



**Image EDP 2.3**: The site in its current form, taken from Parcel B looking west towards High Street and Bedford Road.

- 2.25 The site is dissected along its northern two thirds by a native hedgerow containing two large hedgerow trees, and north to south by the line of footpath no.5.
- 2.26 Topographically the site is relatively flat with a gentle slope down from west to east.
- 2.27 In accordance with the description of the host Landscape Character Area (LCA), the structure of the landscape of Parcel A and B largely consists of geometric fields bounded by hedgerows in mixed condition with some hedgerow trees. Where the site differs from the LCA character is in its scale, with the two field parcels being much smaller than the typical surrounding arable field parcels, typical of the host LCA. This is congruent with its location on the edge of the village, occupying a corner of the wider field pattern bounded by the village to the south, Roxton High Street to the west and Bedford Road to the north.
- 2.28 The sites visual character comprises a combination of small scale field parcels with some surrounding large mature trees. This character is prevalent in other parts of the village. Beyond the site and the village, the prevailing character is of more open arable fields.
- 2.29 In summary, the main character and fabric of the site is a mix between the intimate smaller village edge field parcel, and the wider open arable field character. However, overall, the site landscape fabric does not form a prominent part of the appreciation of the wider landscape character.

#### **Published Landscape Character Assessments**

- 2.30 A review of the Bedford Borough Landscape Character Assessment (BBLCA) finds that the site is located within the LCA 4A Great Ouse Clay Valley. The key characteristics of the LCA are stated below:
  - "A shallow and fairly wide valley of the River Great Ouse founded on Oxford Clay and Alluvium with deposits of Valley Gravel and small sections of Glacial Gravel. Large scale open water bodies, multiple channels and tributary streams are scattered across the floodplain. The course of the river is marked by riverside vegetation including mature willows. Shelterbelts and distinctive clusters of woodland create a semi-enclosed landscape;
  - Mixed land use of arable on the shallow slopes of the valley with pasture, quarrying and recreational uses along the valley floor;
  - Large and medium scale geometric fields are bounded by hedgerows in mixed condition with some hedgerow trees;
  - Restored sand and gravel working are a recreational and ecological resource including Wyboston Leisure Park, Priory Country Park (itself part of the wider Bedford River Valley Park proposals, and associated with the enabling development for the park;
  - The importance of the area in prehistoric times as a focus for ritual sites and funerary monuments is reflected in the presence of a number of ancient monuments;
  - Historic parks at Roxton and Little Barford (and Tempsford within Central Bedfordshire) contain parkland trees as well as medieval earthworks and ridge and furrow. Moated sites and remains of castles are present particularly at strategic points commanding the rivers;
  - Settlement consists of medium sized villages and large industrial complexes including the generating station at Little Barford, Priory Business Park and mixed development around Wyboston Lakes, and clusters of nurseries e.e. around Wyboston;
  - Building materials are varied with local stone churches and bridge at Great Barford, red brick dwellings, black painted clapboard barns, clay tile and thatch roofs, along with more recent industrial buildings of brick, metal and glass;
  - An urban fringe character results from the aural and visual presence of major road corridors of the A1(M) and A421, large scale industrial development, restored sand and gravel workings and large arable fields particularly close to Bedford, although with pockets of intact river valley landscape; and
  - The Ouse Valley Way long distance route and National Cycle Route 51 cross the landscape (line of disused railway line through the Bedford River Valley Park)."

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- 2.31 The general landscape strategy for this LCA is to enhance the landscape through restoring elements that have become degraded or been lost and conserve existing features, whilst specific guidelines are detailed below:
  - "Enhance and restore hedgerows by replanting and consistent management and resist development that will result in further loss/fragmentation of hedgerows and hedgerow trees. Encourage management of arable field margins for biodiversity interest;
  - Ensure active management of the pollarded willows, and plan for succession planting;
  - Continue creation and enhancement of new wetlands and enhance existing open water bodies and their margins to increase biodiversity interest and strengthen character. Explore opportunities associated with mineral restoration and the implementation of the Bedford River Valley Park in Particular;
  - Take opportunities to restore derelict sites such as disused market gardens, and to contribute to GI objectives where possible;
  - Restore pastures on the flood plain of the River Ivel where these have been converted to arable or neglected and take opportunities to restore or create water meadows, enhancing connectivity of the strategic GI network;
  - Ensure management of parkland to retain features of historic significance;
  - Ensure leisure facilities are designed to retain and enhance the rural character and biodiversity interest of the river and wetlands;
  - Take opportunities to plant new woodlands (in particular wet woodlands) that will screen major road corridors of large scale development on the edges of towns (delivering aspirations of the Forest of Marston Vale in relation to the Bedford River Valley Park);
  - Retain the separation of individual villages avoid linear development along roads merging settlements;
  - Ensure enabling development and infrastructure proposals as part of the implementation of the Bedford River Valley Park respect and enhance the river valley landscape and context. Consider visual impact of enabling development in terms of massing, rooflines, scale, materials and visual appearance;
  - Conserve the rural setting of the towns and Villages and enhance the settlement edge for instance by appropriately designed woodland planting to foil large scale development (e.g I relation to enabling developments to deliver the Bedford River Valley Park);

- Conserve the character of secondary roads, limiting urbanising influences e.g. kerbing and widening and ensure that traffic management measures are sympathetic to those sections of the area with rural character; and
- Explore options for improving recreational opportunities and public access to the river. Monitor the associated development of facilities e.g. visitor centres and car parking that might impact upon the surviving sections of rural, tranquil character in the immediate river corridor."
- 2.32 EDP found that the published assessment does not go to a fine enough grain to assess the influences on the character and sensitivity of the site land itself, forming a small part of, the host character area.

#### **Key Constraints and Opportunities - Masterplanning Principles**

- 2.33 With the exception of longer distance views over more open boundaries along the extent of Parcel A, both parcels are considered to be relatively visually unconstrained. Proposed development should respect the surrounding built environment visual amenity and characteristics, including massing, scale and materials, and respond to the more 'exposed' land at the eastern boundary.
- 2.34 Key considerations in relation to landscape and visual terms are:
  - Visual amenity of residential properties with existing views of the site, namely receptors immediately adjacent to the site boundary;
  - Visual amenity of local footpaths, which are predominantly within or immediately adjacent to the site;
  - Landscape character: retention and reinforcement of key landscape fabric that contributes to local landscape character;
  - Relationship of new development with the surrounding built environment characteristics, including massing, scale and materials; and
  - Respond to the more 'exposed' land at the eastern boundary of Parcel A.

#### **Conclusions in Respect of Landscape Matters**

2.35 From a landscape perspective, it is EDP's opinion that there are no 'in principle' constraints with regard to future built development of the site. Furthermore, landscaping measures included within any promoted development would be able to provide targeted mitigation where necessary, which would be effective at promoting biodiversity gains, particularly within that part of the site parcel.

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# Section 3 Ecological Matters

#### **Introduction and Methodology**

- 3.1 This Preliminary Ecological Appraisal has been informed by a desk study undertaken in December 2019, which involved collation of information from the following sources:
  - Bedfordshire and Luton Biodiversity Recording and Monitoring Centre (BRMC);
  - Bedfordshire Bat Group;
  - Multi-Agency Geographic Information for the Countryside (MAGIC¹); and
  - National Biodiversity Network (NBN) atlas website<sup>2</sup>.
- 3.2 The following information was obtained during the desk study:
  - Internationally designated sites (15km radius around the site);
  - Statutory designated sites (2km radius);
  - Non-statutory designated sites (2km radius);
  - Annex II bat species<sup>3</sup> records (6km radius); and
  - All other protected/notable species records (2km radius).
- 3.3 These search areas are considered sufficient to cover the potential zone of influence, in relation to designated sites, habitats and species, of any future development.

# **Extended Phase 1 Survey**

- 3.4 In order to assess the broad habitats present, and advise on any on-site constraints, an Extended Phase 1 survey was undertaken across the Site by a suitably experienced ecologist on 12 November 2019.
- 3.5 An Extended Phase 1 survey adopts methodology from a standard Phase 1 Habitat survey with the addition of more detailed habitat and species mapping. This level of survey requires identification of principle habitat types and the dominant plant species present.

<sup>2</sup> https://nbnatlas.org/

<sup>1</sup> www.magic.gov.uk

<sup>&</sup>lt;sup>3</sup> Bat species listed in Annex II of the EC Habitats Directive, namely Greater horseshoe, Lesser horseshoe, Barbastelle and Bechstein's bat

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This level of survey does not aim to compile a complete floral and faunal inventory for the site. In addition, evidence of protected species or species of principle importance are recorded, and the site is assessed for its potential to support such species.

3.6 November is outside of the optimal time for Extended Phase 1 surveys, and the survey was limited by seasonal factors with plant species not being in flower at the time of survey. Plants were identified via other indicators, such as vegetative features, and the survey is still considered sufficient as it was able to broadly categorise the habitats present within the site, with no indication of complex/unique floral habitats present.

#### **Preliminary Ecological Baseline**

3.7 Information regarding designated sites was obtained during the ecological desk study. Statutory designations (those receiving legal protection) and non-statutory designations (those receiving planning policy protection only) are discussed in turn below.

#### **Statutory Designations**

- 3.8 Statutory designations represent the most significant ecological receptors, being of recognised importance at an international and/or national level. International designations include Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar Sites. National designations include Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs).
- 3.9 Statutory designations receive legal protection under various international and national legislative instruments. This protection is also reflected in policies included within National Planning Policy Framework (NPPF; February 2019), which are given material consideration during the planning application process. In addition, at the local level, statutory designations are afforded planning policy protection under Policy CP25: Biodiversity of the Core Strategy and Rural Issues Plan (adopted April 2008). It states that:

"The biodiversity and geodiversity of the borough and in particular priority habitats, species and geodiversity features, will be protected and where appropriate enhanced.

Where harm to biodiversity and/or geodiversity is likely to be a result of development, appropriate mitigation and/or compensation will be required. Any replacement assets should be of a comparable or enhanced value."

3.10 This is reflected in Policy 43S of the emerging Bedford Borough Local Plan 2030, as submitted for Examination. It states that:

"A proposal which is likely to have an adverse effect on a Site of Special Scientific Interest (SSSI) will not be permitted unless there are exceptional reasons that outweigh the harm to the site."

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3.11 No part of the site is covered by any statutory designation. There are no statutory designations of international importance within 15km of the Site and none of national importance within 2km of the Site. Furthermore, the site does not lie within any SSSI Impact Risk Zones for residential development.

### **Non-statutory Designations**

- 3.12 Non-statutory designations are also commonly referred to in planning policies as 'local sites', although in fact these designations are typically considered to be important at a county level. In Bedfordshire, such designations are named County Wildlife Sites (CWSs). Additional designated sites, which should be considered at this level include Local Nature Reserves (LNRs) and Ancient Semi-natural Woodland (ASNW) where these are not covered by other designations.
- 3.13 Non-statutory designations/local sites do not receive any formal legal protection. However, they do receive planning policy protection, as reflected in the NPPF (paragraph 174). Non-statutory designations are also currently afforded planning policy protection under Policy CP25 of the Core Strategy and Rural Issues Plan 2008 as mentioned previously.
- 3.14 This is reflected in Policy 43S of the emerging Bedford Borough Local Plan 2030, as submitted for Examination, it states that:
  - "Development should be designed to prevent any adverse impact on locally important sites, species and habitats of principal importance contained within the Natural Environment and Rural Communities (NERC) Act 2006. However in these circumstances where an adverse impact is unavoidable, the application shall demonstrate how the harm will be reduced through appropriate mitigation."
- 3.15 No part of the site is covered by any non-statutory designations, however, there is one such designation within 2km of the site. The River Great Ouse CWS is located 0.8km east of the site, and contains the River Great Ouse, considered a Priority Habitat<sup>4</sup>, and other habitats including potentially neutral grassland, scrub, mature trees and pollards, copses and plantations and ruderal vegetation. Policy 45 of the emerging Bedford Borough Local Plan 2030 relates to proposals that are along or adjoining the River Great Ouse, and states that;

"Development proposals along and adjoining the River Great Ouse will be required to:

- Improve access to the River Great Ouse including canoe portage areas and related facilities will be supported as outlined in the 2011 Bedford Waterspace Study (or as amended) where it can be demonstrated that there will be no harmful impact on the character or environment;
- ii. Deliver improvements as relevant to the site and area of the river in accordance with the 2011 Bedford Waterspace Study;

<sup>&</sup>lt;sup>4</sup> Habitat of Principle Importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006

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- iii. Ensure that new river moorings have pedestrian access and vehicle access to an adopted road, unless it can be demonstrated that there is an alternative means of access; and
- iv. Ensure that new marinas have access to an adopted road and car parking is provided in accordance with the Parking Standards for Sustainable Communities: Design and Good Practice supplementary planning document to accommodate visitors' and residents' vehicles."
- 3.16 Any development proposals for the site (Parcel A or B) will need to have consideration to ensure that there are no significant impacts upon the River Great Ouse CWS, such as through changes to the local hydrology and impacts on surface and ground water flows.

#### **Habitats and Species**

- 3.17 There are no records of Priority Habitats occurring with the site. The following UK Priority Habitats are known to be located within 2km of the site:
  - Deciduous Woodland;
  - Traditional Orchard; and
  - Lowland Fens.

#### **Habitats**

3.18 The distribution of the different habitat types within the site, confirmed through an Extended Phase 1 Habitat survey.

#### Grassland

3.19 Most of both parcels (A and B) contains species-poor semi-improved grassland. Species within the grassland included perennial rye grass (Lolium perenne), cocks' foot (Dactylus glomerata), Yorkshire fog (Holcus lanatus), creeping thistle (Cirsium vulgare), yarrow (Achillea millefolium), white clover (Trifolium repens) and dandelion (Taraxacum sp.). The grassland is of low intrinsic value and offers very limited opportunities for protected species due to the management regime and frequent cutting. The desk study returned many records of protected/notable species within 2km of the site. These include many records of birds, including farmland species, which could be present within the site, including yellow hammer (Emberiza citrinella), song thrush (Turdus philomelos), house sparrow (Passer domesticus), grey wagtail (Motacilla cinerea), redwing (Turdus iliacus) and fieldfare (Turdus pilaris). Low numbers of common and widespread bat species have also been recorded in the wider landscape around the site. Other records of protected/priority species in the wider area include barn owl (Tyto alba), brown hare (Lepus europaeus), harvest mouse (Micromys minutus), common frog (Rana temporaria) and toad (Bufo bufo), smooth newt (Lissotriton vulgaris) and white clawed crayfish (Austropotamobius pallipes).

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3.20 Given the lack of high value habitats present and the intensive management of the majority of the site, it is considered unlikely that any of the species above would be significantly impacted by development within the site.

#### Tall Ruderal

3.21 The majority of the field margins consist of tall ruderal vegetation. Species within the tall ruderal included common nettle (*Urtica dioica*), ribwort plantain (*Plantago lanceolata*), thistle (*Cirsium sp.*) and common ragwort (*Jacobaea vulgaris*).

#### **Hedgerows**

3.22 There are a number of hedgerows across both site parcels, species within the hedgerow include elder (Sambucus nigra), common hawthorn (Crataegus monogyna), elm (Ulmus sp.), sycamore (Acer pseudoplatanus) and bramble (Rubus fruticosus).

#### **Waterbodies**

3.23 Across the entire site, there are two ponds, one within Parcel A and one in Parcel B, as shown on **Plan EDP 3**. The pond in Parcel A has sloped sides and a depression of approximately 1.5m. At the time of survey, the water level in the pond was approximately 30cm deep. The pond in Parcel A was surrounded by scrub, tall ruderal and scattered trees. The pond in Parcel B had steeper sides and a deeper depression of 2.5m. During the summer months both ponds would be heavily shaded. Species surrounding the ponds included willow (*Salix* sp.), elder and birch (*Betula* sp.) with the tall ruderal consisting of nettles and thistle. The pond in Parcel A contained duckweed (*Lemnoideae* sp.).

### **Buildings**

- 3.24 There is one building located in the south of the Parcel A. The building is a large corrugated barn building with an asbestos roof. The building does not have any suitable features for roosting bats and so is considered to be of negligible potential for roosting bats.
- 3.25 There is one building located in the west of Parcel B. The building is single storey with the sides being tiled and the roof corrugated. The building is considered to have low potential to support roosting bats.

# Orchard

- 3.26 There is a small orchard located in the south-west corner of Parcel A. The orchard consists of apple trees (*Malus* sp.). The trees within the orchard are young and are approximately 1.5m in height.
- 3.27 It appears that the orchard is currently managed in a low intensity way, however, its past management, and whether any chemicals such as pesticides or inorganic fertilisers have been used, is unknown. Due to the young age of the orchard there is an absence of dead-

- wood, and therefore valuable saproxylic (dead wood) invertebrate species, typically associated with traditional orchards, are unlikely to be present.
- 3.28 Over time, through prolonged management via traditional methods with the absence of any chemical use or frequent mowing, and with habitat restoration/enhancement, the orchard 'could' be considered to have the habitat structure and biodiversity value necessary to meet the criteria for the Priority Habitat 'traditional orchard'. However, the habitat, and its' structure, currently present is not considered consistent with the Priority Habitat description for Traditional Orchards<sup>5</sup>.
- 3.29 Although the site is considered to provide opportunities for several protected or notable species, these opportunities are primarily restricted to the boundary habitats, owing to the predominance of arable cultivation and management.

## **Key Constraints and Opportunities - Masterplanning Principles**

- 3.30 The following constraints and opportunities have been identified during the Preliminary Ecological Appraisal:
  - The proximity of the site to the River Great Ouse CWS;
  - Retention and enhancement of existing hedgerows with new native tree/scrub/hedgerow planting;
  - Retention and enhancement of the pond through an appropriate management regime, with additional pond creation to enhance aquatic wildlife; and
  - Enhancement and management of the existing orchard.

#### **Species**

3.31 As with any proposed development, and subject to confirmation through consultation with the Local Planning Authority (LPA) Ecologist, a focused suite of Phase 2 surveys and an ecological assessment will be required to support any planning application coming forward for the site and to inform the design of a robust masterplan.

### **Great Crested Newts**

3.32 Environmental DNA sampling was undertaken on both ponds. Environmental DNA (eDNA) is DNA that is collected from the environment in which an organism lives. In aquatic environments, animals (including amphibians) shed cellular material into the water via their saliva, urine, faeces, skin cells, etc. This DNA may persist for several weeks and can

<sup>&</sup>lt;sup>5</sup> UK Biodiversity Action Plan; Priority Habitat Descriptions. BRIG (ed. Ant Maddock) 2008. (Updated Dec 2011)

be collected through a water sample and analysed to determine if the target species of interest (great crested newt) is/has been present in the waterbody.

- 3.33 Water samples were taken by an experienced EDP ecologist with a Natural England great crested newt class survey licence, and an assistant. The survey was completed in accordance with the methodologies set out by the Freshwater Habitats Trust<sup>6</sup> on 29 June 2020.
- 3.34 Both ponds returned negative eDNA results and so great crested newts are not considered to be a constraint to development.
- 3.35 Based on the nature of the habitats present, as described above, and subject to an assessment of the likely impacts arising from any development proposals, the following additional suite of protected species surveys would likely be required to inform any forthcoming planning applications:
  - Bird surveys;
  - Bat activity surveys;
  - Bat roost surveys of building in Parcel B and trees in both parcels (if they are to be removed);
  - Badger surveys; and
  - Reptile surveys.
- 3.36 Overall, the Preliminary Ecological Appraisal has confirmed that both Parcels A and B support habitats of low intrinsic ecological value, with a typical suite of likely protected species interests (to be confirmed through further detailed survey). There are considered no 'in principle' ecological constraints to any forthcoming development.
- 3.37 The scheme has potential to be delivered in accordance with current national and local planning policy with regard to the natural environment.
- 3.38 It is therefore concluded that the site would be capable of delivering a high-quality scheme in response to local housing needs, whilst ensuring compliance with national and local planning policy relating to biodiversity, and relevant wildlife legislation, subject to appropriate masterplanning of the Site.

Biggs J, Ewald N, Valentini A, Gaboriaud C, Griffiths RA, Foster J, Wilkinson J, Arnett A, Williams P and Dunn F 2014. Analytical and methodological development for improved surveillance of the Great Crested Newt, Appendix 5, Technical advice note for field and laboratory sampling of great crested newt (*Triturus cristatus*) environmental DNA. Freshwater Habitats Trust, Oxford

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# Section 4 Arboricultural Matters

# Methodology

- 4.1 The methodology adopted for this survey is based on guidelines set out in *BS* 5837:2012 Trees in Relation to Design, Demolition and Construction, especially Section 4.4, 'Tree Survey'. Site trees and other significant vegetation are as noted on **Plan EDP 4**. This is derived from the topographic survey data. All surveyed items are detailed in **Schedule EDP 1** (**Appendix EDP 2**). No other trees are covered by this survey.
- 4.2 All trees have been visually inspected from ground level unless otherwise stated, with no climbing or further detailed investigative tests being undertaken. The comments on their condition are based on observable factors present at the time of inspection. All measurements are metric and have been recorded in accordance with the measurement conventions set out in Section 4.4.2.6 of BS 5837:2012.
- 4.3 Any recommendations given regarding longer-term management are made on the basis of optimising the life expectancy of site trees, given their current situation and any effects that may result from the development proposals.
- 4.4 **Schedule EDP 1** (**Appendix EDP 1**) provides information about the following factors in accordance with paragraph 4.4.2.5 of BS 5837:2012:
  - Sequential reference number (recorded on Appendix EDP 2);
  - Species;
  - Height;
  - Stem diameter;
  - Branch spread;
  - Existing height above ground level;
  - Life stage;
  - Physiological condition;
  - Structural condition;
  - Preliminary management recommendations;
  - Estimated remaining contribution;

- · Category grading; and
- Tree works priority codes.
- 4.5 Due to the changing nature of trees and other site circumstances, this report and any recommendations made are limited to a 24-month period from the survey date. Any alterations to the site or the development proposals could change the current circumstances and may invalidate this report and any recommendations made.
- 4.6 Trees are dynamic structures that can never be guaranteed 100% safe; even those in good condition can suffer damage under average conditions. Regular inspections can help to identify potential problems before they become acute.
- 4.7 A lack of recommended work does not imply that a tree is safe and likewise, it should not be implied that a tree will be made safe following the completion of any recommended work.
- 4.8 The subject trees have not been tagged for identification purposes.

## **Aims and Objectives**

4.9 The arboricultural tree constraints information contained within this Technical Note will feed into the masterplanning for the site and in turn, inform the Arboricultural Impact Assessment and support the Outline Planning Application.

#### **Overview of Tree Stock**

- 4.10 The survey has identified 44 individual trees, 6 groups of trees and 7 hedgerows. Of these items, 2 have been categorised as A, of high quality and value; 24 have been categorised as B, of moderate quality; and 31 have been categorised as C, of low quality.
- 4.11 All surveyed items are as noted on **Plan EDP 4** and detailed in **Schedule EDP 1** (**Appendix EDP 1**).

# **Statutory Protection**

#### **Tree Preservation Orders and Conservation Areas**

4.12 Consultation with the online mapping facility for the LPA, Bedford Borough Council, has confirmed that no Tree Preservation Orders are registered on or adjacent to the Site. The Roxton Conservation Area abuts the site, but no trees included within the assessment are located within the conservation area.

#### **Site Constraints**

- 4.13 Any items identified as being located off-site remain outside of the direct control of the scheme, however, their above- and below-ground constraints will need to be considered during the design process.
- 4.14 The required RPA for each item is as described in **Schedule EDP 2** (**Appendix EDP 2**) and is depicted on **Plan EDP 4**. To ensure appropriate protection is afforded to the roots, the extent of the RPA shall be defined by means of the installation of protective barriers in accordance with the recommendations given in Section 6.2 of BS 5837:2012. The extent of this enclosed area, known as the Construction Exclusion Zone (CEZ), will be depicted on a Tree Protection Plan, to follow with the Arboricultural Method Statement.
- 4.15 All of the surveyed items are located around the perimeter of the site and, providing that designated RPAs and canopies are respected, they do not adversely constrain the potential to accommodate residential development in the main body of the site.

#### Conclusion

- 4.16 Of the items surveyed, 2 have been identified as Category A, of high quality and value and 24 have been identified as Category B, of moderate quality and value. These items should be prioritised for retention due to their condition, age and retention span.
- 4.17 All of the surveyed items are located around the perimeter of the site (or internal field parcels) and, providing that designated RPAs and canopies are respected, they do not adversely constrain the potential to accommodate residential development in the main body of the site, with the exception of a proposed access from Bedford Road/High Street.
- 4.18 The arboricultural constraints information provided with this Technical Note will feed into the masterplanning for the site.
- 4.19 Once the Masterplan has been fixed, an Arboricultural Impact Assessment and Tree Protection Plan will be undertaken to support the Outline Planning Application and to ensure the safe, long-term retention of the arboricultural items for the site.

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# Section 5 Heritage and Archaeology Matters

#### Introduction

- 5.1 The following section considers any in principle issues with the allocation of the two parcels of land off Bedford Road at Roxton, Bedfordshire (hereafter referred to as 'Parcel A' and 'Parcel B') in terms of the historic environment. This involved a review of information from the Bedfordshire Historic Environment Record (HER), mapping from the Bedfordshire Archives and data from the National Heritage List for England. These sources were augmented by a site walkover in November 2019.
- 5.2 Both Parcel A and B are areas of grassed farmland on the north-west edge of the village of Roxton. Parcel A contains a single modern barn and comprises two fields, divided by a hedgerow, with a pond and footpath. It is bounded to the west by a road, to the south by the College Farm complex, and to the east and north by farmland.
- 5.3 By comparison, Parcel B contains a single modern poultry shed, and comprises a single field. It is bounded by a mixture of 20<sup>th</sup> century and older residential dwellings to the east, south and west, and by a small paddock to the south and a road to the north and north-west.
- 5.4 Both parcels are flat, at approximately 20m above Ordnance Datum (aOD). They are both located on mudstone of the Peterborough Member, overlain by sand and gravel of River Terrace Deposits (www.bgs.ac.uk).

#### **Designated Heritage Assets**

- 5.5 Neither parcel contains any world heritage sites, scheduled monuments, listed buildings, registered parks and gardens or registered battlefields. Both Parcel A and Parcel B contain small portions of the Roxton Conservation Area.
- 5.6 The following sub-sections assess those assets that are most likely to be affected by the development of the sites, including any contribution the sites make to their significance. These were selected through a review of information from the relevant sources (see above) and observations made during the site visits in November 2019, paying due regard to the local topography and built and planted environment. The locations of these assets are shown on the **Image EDP 5.1**.



**Image EDP 5.1**: Designated Heritage Assets (blue dots = listed buildings; pale yellow area = Roxton Conservation Area).

# **Grade II\* Listed Parish Church of St Mary Magdalen**

- 5.7 This is a 14<sup>th</sup> and 15<sup>th</sup> century church built of brown cobblestones and ashlar dressings, with slate roofs. It includes two medieval tombs and a rood screen dado, as well as 19<sup>th</sup> century additions/alterations. It primarily derives its significance from its historic and architectural interest as a medieval church with later alterations. It also has artistic interest, given the craftsmanship of its architectural embellishments and monuments. In terms of archaeological interest, it also has the ability to demonstrate changing religious and artistic tastes, given its piecemeal alterations since its first construction.
- 5.8 In terms of its setting, the church is located within a graveyard, including densely planted boundaries, accessed off School Lane. This primary setting provides a positive contribution to the significance of the listed building, in terms of historic and functional links, as well as providing space to appreciate the outward form of the listed building, and the enclosed and tranquil character.

- 5.9 Beyond this immediate setting, the church also has historic and functional connections with the wider village. which contribute positively to its significance, albeit, given the relatively squat tower, this link is not easily discernible from the wider road network, due to intervening built form.
- 5.10 In terms of Parcel A, there is a PRoW that runs north–south through the eastern half of it. From this, there are medium distance views toward the church tower. Indeed, given that this pathway leads up to a point opposite the church on School Lane, it is plausible that the footpath is aligned on this locally distinct feature. This footpath appears to be a relatively recent creation, only being attested to on late 19<sup>th</sup> century cartographic sources. As such, this footpath and the approach to the church is considered to make an, albeit very limited, contribution to the significance of this listed building (see **Image EDP 5.2**).



**Image EDP 5.2**: View from footpath within Parcel A, looking south toward the tower of the Parish Church of St Mary Magdalen.

5.11 Parcel B, is not considered to make any contribution to the significance of the church due to the very limited visible connections with it, the tower being almost entirely hidden by the planted and built environment, and the lack of any other known links.

#### **Grade II listed College Farmhouse**

5.12 College Farmhouse is a 16<sup>th</sup>/17<sup>th</sup> century timber framed building, constructed in a T-shape arrangement with old clay tile roof and brick and stone chimney stacks. It is considered to derive the majority of its significance from its historic and architectural interests, as a late medieval/early post-medieval farmstead in the local vernacular.

- 5.13 Its immediate setting is characterised by its large gardens to the west, surrounded by a modern brick wall and hedges, and the defunct farmyard to the east, containing converted stable blocks. It does not appear to be an operational farm, but rather the farmhouse and farmyard are now used for residential purposes. The gardens, farmyard and converted farm buildings contribute to the significance of this building, due to historic and/or functional relationships.
- 5.14 The High Street runs immediately to its south and, in combination with the garden and farmyard, provide the best opportunities for experiencing its significance, in terms of its outward form.
- 5.15 Parcel A forms farmland that abuts the farmyard and gardens of College Farmhouse, albeit there is an element of separation from the farmhouse, due to the high modern brick boundary walls and the converted stable blocks, which create a physical and visual barrier (see **Image EDP 5.3**). This limits visual connections with the farm, albeit allowing some appreciation of the significance demonstrated in the built form.
- 5.16 The Roxton Parish Map of 1813 suggests that the southern field in Parcel A was functionally associated with the farmhouse, but that the northern field was at that time not. However, it should also be considered that this relationship with the southern field is not current today, with the farmhouse no longer the functioning hub of a farm. Furthermore, other than proximity, there is little tangible evidence of this link, with the visual links obscured and physical links severed (if there ever were any) between the two, as described above. Therefore, the contribution of Parcel A to the significance of the farmhouse is considered limited/moderate and deriving almost entirely from the southern field in its former historic and functional links and in limited visual links.



**Image EDP 5.3**: View from south of Parcel A, looking south toward modern farm barn and College Farmhouse (seen on right, building with chimney stacks).

5.17 Parcel B is also separated from the farmhouse through a combination of the garden planting, 20th century housing to the south of the listed building, and the High Street roadway, which lies between the two (see **Image EDP 5.4**). Parcel B also forms an area of farmland, albeit framed by 20th century housing that surrounds it to the north, south and west when viewed from the farmhouse, unlike the more open character of Parcel A that melds into the adjoining countryside. There are no known historic or functional links with the farmhouse.



Image EDP 5.4: View from north west corner of Parcel B, looking north toward College Farmhouse.

5.18 There is a limited appreciation of the farmhouse from Parcel B due to the built and planted environment. Nevertheless, Parcel B also contributes to the significance of the farmhouse by forming an area of farmland providing rural context in close proximity to the listed building, also considered to be a very limited contribution.

#### **Roxton Conservation Area**

- 5.19 No publicly available conservation area appraisal was identified for this asset and the following is based on observations made during the site walkover in November 2019. Given the locations of Parcel A and Parcel B, the assessment focuses on the northern end of the conservation area, as the local topography and built and planted environment is such that there is all but no appreciation of the southern end of this asset.
- 5.20 Roxton Conservation Area appears to incorporate the historic core of the village and some adjoining paddocks and fields. The arrangement of the village core is broadly linear, stretching from College Farmhouse in the north to Roxton Park in the south.
- 5.21 The historic (i.e. pre-20<sup>th</sup> century) buildings mostly face directly onto the local road network, whereas 20<sup>th</sup> century infill housing (also included in the extent of the asset) are variously

arranged in a mixture of single plots adjacent the road and set back, and in cul-de-sacs. Along the north end of the High Street in particular, this has created a densely packed and closely spaced built environment, with few views into the farmed landscape beyond. One of the exceptions of this enclosed character along the roadways is from Park Road, where the sparsity of boundary planting allows views into a scrubby paddock within the conservation area, beyond which is Parcel B (see **Image EDP 5.5**).



**Image EDP 5.5**: View from Park Road looking north, across a scrubby paddock within the conservation area, beyond which is Parcel B.

5.22 The architectural styles of the buildings within the conservation area vary widely, such as whitewashed and thatched cottages, concrete tile roofed and bare red brick 20<sup>th</sup> century houses, arranged as single houses, terraces and semi-detached dwellings (see **Image EDP 5.6**). The predominant elements are two-storey, with chimneys and pitched roofs, although there are some examples of bungalows. Whereas the north of the conservation area is characterised as mostly 20<sup>th</sup> century housing, predominantly of small scale in small plots, the centre of the conservation area is a mix of historic and modern housing in generous sized-garden plots and built to a larger scale. The character and appearance is therefore considered to be very mixed, as described above.



Image EDP 5.6: View north from junction of Park Road and the High Street.

- 5.23 The conservation area extends into a small part of Parcel A, comprising a modern storage yard. As such, this is not considered to contribute to the character and appearance of the asset. Otherwise, the majority of Parcel A adjoins, but is not included within, the north boundary of the conservation area. Given the local topography and built and planted environment, there are no opportunities to experience Parcel A from within the conservation area, although Parcel A allows views to College Farmhouse and the church when approaching along the aforementioned footpath within it and from Bedford Road, which forms the main access to the village from the north. Therefore, it makes a very limited contribution to the conservation area's significance by forming part of the rural edge of the asset and containing a historic route into the village centre.
- 5.24 In terms of Parcel B, only a small part of this is included in the conservation area, formed by a gravel track that leads from the High Street to a modern poultry shed within the eastern edge of Parcel B. Otherwise the majority of Parcel B is outside of the asset and is mainly experienced through glimpsed views, filtered through the planted and built environment, with the clearest views from the very north end of High Street (see **Image EDP 5.7**) and part of Park Road (see **Image EDP 5.5**), where boundaries are more permeable. In terms of these views, Parcel B is appreciated as an area of grassland enclosed by mainly 20th century development and cut off from the wider landscape.



**Image EDP 5.6**: View from the north end of the High Street, looking south across Parcel B. Note modern housing on its boundary.

5.25 Therefore, whilst the gravel track is not identified as contributing to the character and appearance of the conservation area, the remainder of Parcel B makes a limited positive contribution to the significance of the asset by forming part of its farmed edge and, along with Parcel A, being one of the first elements experienced on the approach from the north, notwithstanding its enclosed character and context of modern development.

#### **Non-designated Heritage Assets**

- 5.26 In terms of non-designated heritage assets, the eastern edge of Parcel A is included within an area of identified cropmarks, interpreted as prehistoric sub-rectangular enclosures and other linear features. However, the HER entry also notes that "trenching in the area uncovered very few features, none of which were datable".
- 5.27 Archaeological investigations ahead of the A421 construction, c.200m to the north-west, identified a small group of early Roman sub-rectangular enclosures, which may have had Iron Age predecessors. Archaeological remains associated with these enclosures were sparse, with one possible circular structure, a four-post and a two-post structure, gullies and shallow hollows. Therefore, this appears to form a small rural farming settlement.
- 5.28 Given the sites location on river terrace gravels, and their proximity to prehistoric and Roman finds, there is considered a medium potential for them to contain archaeology from these periods. However, considering the results of nearby investigations, it is unlikely they would be of such significance as to warrant preservation *in situ*.

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- 5.29 Both Parcel A and B are included in the theoretical extent of the medieval village of Roxton. However, the extent of this entry appears to be based on later post-medieval mapping, and its accuracy is therefore unknown. It is probable that both sites were farmland throughout these periods, as well as subsequently into the post-medieval and modern periods.
- 5.30 Indeed, late 19<sup>th</sup> and 20<sup>th</sup> century editions of the Ordnance Survey maps show both sites as farmland, with an area of farmyard for a now demolished farm complex extending into the eastern edge of Parcel B.
- 5.31 As such, it is considered that there is a low potential for either Parcel A or B to contain archaeological remains of such significance that they would inhibit the deliverability of the site or influence its capacity. There is a medium potential for prehistoric and Roman remains, and a low potential for all other periods, apart from 'negligible' value deposits and features related to medieval and later farming practices.
- 5.32 Parcel A and B both contain modern farm buildings, none of which are considered to be of any historic or architectural interest and are not considered to be 'non-designated heritage assets'.

#### **Summary**

- 5.33 With regard designated heritage assets, it is considered that Parcel A makes a very limited contribution to the significance of the Grade II\* listed Parish Church of St Mary Magdalen, a very limited contribution to the significance of the Grade II listed College Farmhouse and a very limited contribution to the significance of Roxton Conservation Area.
- 5.34 Parcel B makes a limited contribution to the significance of College Farmhouse and Roxton Conservation Area.
- 5.35 As such, these designated heritage assets would need to be carefully considered in any future masterplanning exercise in order to minimise or avoid harm to their significance. In some instances, such as the visual link to the church tower along the footpath within the north of the site, retention of the footpath and careful landscaping could minimise, if not altogether avoid, any potential harm to the church's significance.
- 5.36 Given that the contributions of the site to the significance of these assets are limited or very limited, there is no current reason to believe that these are such overwhelming considerations that they should preclude the overall deliverability of the sites, or markedly curtail their capacity.
- 5.37 With regard non-designated heritage assets, both parcels are considered to have a low potential to contain archaeological remains that would influence their deliverability or capacity.
- 5.38 On heritage grounds, there is no reason why Parcel A and B should not be allocated in the local plan.

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# Appendix EDP 1 Schedule EDP 1 Tree Survey Key and Schedule

Sequential Reference	T - Individual specimen;
Number	G - Group, Trees that form cohesive arboricultural features either
	aerodynamically, visually or culturally;
	H - Linear group of specimens that form a hedge or boundary; and
	W - A larger group or area of trees that should be regarded as a single
	woodland unit
Charles	
Species	Common English names are used wherever possible for simplicity
Height	An approximation of height (in metres) is provided for the highest point of the
<u> </u>	tree.
Stem Diameter	This is the measurement of stem diameter in millimetres taken in accordance
	with Annex C of BS 5837:2012.
Branch Spread	This is taken at four cardinal points, with a stated value in metres to enable
	an accurate representation of the crown, as shown on Plan EDP 4.
Existing Height Above	An approximation of height (in metres) of crown clearance above adjacent
Ground Level	ground level.
Life Stage	There are six classes to which trees are assigned:
	Young;
	Semi Mature;
	Early Mature;
	Mature;
	Over Mature; and
	Veteran.
Physiological	An indication of the tree's physiological condition is represented and classed
Condition	as good, fair, poor or dead, this is informed by the following:
	Canopy Density: It should be taken that, unless otherwise stated with each
	individual entry, the canopy density of the trees is typical of the species; and
	Leaf Size and Colouration: It should be taken that, unless otherwise stated
	with each individual entry, leaf size and colouration is typical of the species.
Structural Condition	Additional notes are provided giving details of the tree's structural condition.
	This is informed by "the presence of any decay and physical defect7".
Preliminary	These are made on the basis of optimising the life expectancy of site trees,
Management	given their current situation and that which may result from the development
Recommendations	proposals. The survey process pays particular attention to implications for life
	and/or property; defects recorded under the structural condition have the
	necessary mitigation measures proposed within this section of the schedule.
	, .G

<sup>&</sup>lt;sup>1</sup> BS 5837:2012 Section 4.4.2.5

<b>Estimated Remaining</b>	The definitions of the terms used are as follows and describe the estimated
Contribution	length of time (in years) over which the tree can be expected to make a safe
	contribution to local amenity:
	Less than 10;
	10+;
	20+; and
	40+.
Onto do su Oscallos d	The short have been actived (III) and obtain the little (All to (All t
Category Grading	Trees have been assigned 'U' or Category Grading 'A' to 'C' in accordance with
	the Cascade Chart given in BS 5837:2012.
Tree Works Priority	Priority codes from 1 to 3 have been given for trees requiring work. The
Codes	definition of the codes used is as follows:
	Priority 1: Work that should be undertaken urgently due to the identification
	of a potential hazard;
	Disarity Or Wards that about his condendation prior to any consultance assigns
	Priority 2: Work that should be undertaken prior to any works commencing
	on site; and
	Priority 3: Work that should be undertaken following the completion of the
	development.
	development.

Client:	Rainier Developments Ltd									Site:	Land off Bedford R	oad, Roxton				
Date of	9th January 2020									Consultant	Tim Ranger					
Survey: Tagged	N/A									Weather	Dry and Sunny					
Sequential	·		Stem		Branch S	Spread (m)		Canopy		Physiological					Category	
Reference No.	Species	Height (m)	Diameter (mm)	North	East	South	West	Clearance (m)	Life Stage	Condition	Structural Condition	Comments / Notes	Recommendations	RPA Radius (m)	Grading	Priority
H1	Holly (llex aquifolium)	2	# 6x60	1.5	1.5	1.5	1.5	0	Early Mature	Fair	Fair	Hedgerow - maintained	No Work Recommended	1.8	B1	N/A
T2	Sycamore (Acer pseudoplatanus)	15	# 380 480	6	6	6	6	3	Early Mature	Fair	Fair	Base obscured Dense undergrowth at the base Epicormic growth at the base Minor deadwood No obvious defects Pruning wounds Typical crown form for the species Stem - twin	No Work Recommended	7.3	B1	N/A
G3	Sycamore (Acer pseudoplatanus) Holly (Ilex aquifolium) Leyland Cypress (Cupressocyparis leylandii) Yew (Taxus baccata)	8	# 180	4	4	4	4	2	Semi Mature	Fair	Fair	Base obscured Crown overhanging into the site Located outside the site No obvious defects Unable to gain access to base	No Work Recommended	2.2	C1	N/A
T4	English Oak (Quercus robur)	20	# 1000	8	8	8	8	3	Mature	Fair	Fair	Base obscured Crown overhanging into the site Located outside the site No obvious defects Unable to gain access to base	No Work Recommended	12.0	B1	N/A
H5	Hawthorn (Crataegus monogyna) Holly (Ilex aquifolium)	2	# 6x60	1	1	1	1	0	Early Mature	Fair	Fair	Hedgerow - maintained	No Work Recommended	1.8	B1	N/A
Н6	Blackthorn (Prunus spinosa) Elder (Sambucus nigra) English Elm (Ulmus procera) Hawthorn (Crataegus monogyna) Wild Cherry (Prunus avium)	2	# 6x60	1	1	1	1	0	Early Mature	Fair	Fair	Hedgerow - maintained	No Work Recommended	1.8	C1	N/A
T7	Wild Cherry (Prunus avium)	5	170	3	3	3	3	1	Semi Mature	Fair	Fair	Bark wounds on the stem - minor Branches - Broken No obvious defects Typical crown form for the species	No Work Recommended	2.0	C1	N/A
Т8	Sycamore (Acer pseudoplatanus)	5	170	3	3	3	3	1	Semi Mature	Fair	Fair	Bark wounds on the stem - minor Branches - Broken No obvious defects Typical crown form for the species	No Work Recommended	2.0	C1	N/A
Т9	Common Lime (Tilia x europaea)	9	280	2	4	4	4	1	Semi Mature	Fair	Fair	Located outside the site No obvious defects Crown - Suppressed Crown overhanging into the site	No Work Recommended	3.4	B1	N/A
T10	Wild Cherry (Prunus avium)	8	# 250	5	5	1	5	1	Semi Mature	Fair	Fair	Crown - Suppressed Crown overhanging into the site Located outside the site No obvious defects	No Work Recommended	3.0	B1	N/A
T11	Wild Cherry (Prunus avium)	5	# 250	5	5	5	5	1	Semi Mature	Fair	Fair	Crown overhanging into the site Located outside the site No obvious defects	No Work Recommended	3.0	B1	N/A

Stem Diameter - This is the measurement of stem diameter in millimetres taken in accordance with Annex C of BS5837:2012. # - estimated Branch Spread -This is taken at four cardinal points, with a stated value in metres to enable an accurate representation of the crown

First Significant Branch -Height of first significant branch and direction of growth e.g. 2.4 N, measured from adjacent ground level.

Existing Height Above Ground Level -An approximation of height (in metres) of crown clearance above adjacent ground level. Life Stage -There are five classes to which trees are assigned: Young; Early Mature; Mature; Over Mature; Veteran.

Physiological Condition -An indication of the tree's physiological condition is represented and classed as good, fair, poor or dead, this is informed by the following: Canopy Density: It should be taken that, unless otherwise stated with each individual entry, the canopy density of the trees is typical of the species; and Leaf Size and Colouration: It should be taken that, unless otherwise stated with each individual entry, leaf size and colouration is typical of the species.

Sequential Reference Number -T - Individual specimen; G - Group, Trees that form cohesive arboricultural features either aerodynamically, visually or culturally; H - Linear group of specimens that form a hedge or boundary; W - A larger group or area of trees that should be regarded as a single woodland unit.

Sequential Reference Number -T - Individual specimen; G - Group, Trees that form cohesive arboricultural features either aerodynamically, visually or culturally; H - Linear group of specimens that form a hedge or boundary; W - A larger group or area of trees that should be regarded as a single woodland unit.

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Estimated Remaining Contribution -The definitions of the terms used are as follows and describe the estimated length of time (in years) over which the tree can be expected to make a safe contribution to local amenity: Less than 10; 10+; 20+; and 40+.

Commontial			Stem		Branch S	pread (m)		Capany		Physiological					Catadani	
Sequential Reference No.	Species	Height (m)	Diameter (mm)	North	East	South	West	Canopy Clearance (m)	Life Stage	Physiological Condition	Structural Condition	Comments / Notes	Recommendations	RPA Radius (m)	Category Grading	Priority
T12	English Elm (Ulmus procera)	4	# 120	3	3	3	3	1	Semi Mature	Fair	Fair	Epicormic growth at the base Located outside the site Bark wounds at the base - minor	No Work Recommended	1.4	C1	N/A
T13	Field Maple (Acer campestre)	13	#800	7	7	7	7	1	Mature	Fair	Fair	Branches - Broken Branch stubs Branches - Crossing and Rubbing Crown overhanging into the site Located outside the site Minor deadwood Multi leaded at 1.6m No obvious defects Typical crown form for the species	No Work Recommended	9.6	B1	N/A
T14	Field Maple (Acer campestre)	10	310	5	5	2	5	1	Semi Mature	Fair	Fair	Crown - Suppressed Crown overhanging into the site Located outside the site No obvious defects	No Work Recommended	3.7	B1	N/A
T15	Common Ash (Fraxinus excelsior)	10	# 300	3	5	5	5	3	Semi Mature	Fair	Fair	Compacted ground at the base Located outside the site No obvious defects Typical crown form for the species	No Work Recommended	3.6	B1	N/A
T16	Common Ash (Fraxinus excelsior)	10	# 300	5	5	3	5	0.5	Semi Mature	Fair	Fair	Compacted ground at the base Located outside the site No obvious defects Typical crown form for the species	No Work Recommended	3.6	B1	N/A
T17	English Elm (Ulmus procera)	4	# 120	2	2	2	2	0.5	Semi Mature	Fair	Fair	Epicormic growth at the base Located outside the site Bark wounds at the base - minor	No Work Recommended	1.4	C1	N/A
T18	English Elm (Ulmus procera)	4	# 120	2	2	2	2	0.5	Semi Mature	Fair	Fair	Epicormic growth at the base Located outside the site Bark wounds at the base - minor	No Work Recommended	1.4	C1	N/A
T19	Norway Maple (Acer platanoides)	10	360	5	5	5	5	2	Semi Mature	Good	Good	Located outside the site Minor deadwood No obvious defects Typical crown form for the species	No Work Recommended	4.3	B1	N/A
T20	Whitebeam (Sorbus aria)	4	# 60 100	2.5	2.5	2.5	2.5	1	Semi Mature	Poor	Poor	Branches - Crossing and Rubbing Minor deadwood No obvious defects Stem - twin Stem - leaning	No Work Recommended	1.4	C1	N/A
T21	Whitebeam (Sorbus aria)	7	# 6x100	5	2	3	2	1	Early Mature	Poor	Poor	Branches - Crossing and Rubbing Cultivated ground at the base Minor deadwood Stem - multi	No Work Recommended	2.9	C1	N/A
G22	Common Ash (Fraxinus excelsior) Crack Willow (Salix fragilis) English Elm (Ulmus procera) Goat Willow (Salix caprea)	8	# 6x100	4	4	4	4	0	Semi Mature	Poor	Poor	Bark wounds at the base - major Bark wounds on the stem - minor Branch stubs Branches - Broken Branches - Hanging Cavity in the stem Crown - storm damage Crowns - Interlocked Failed stem(s) Minor deadwood Stem - multi Located around a pond	No Work Recommended	2.9	C1	N/A
H23	Elder (Sambucus nigra)	1.8	# 6x60	1.5	1.5	1.5	1.5	0	Early Mature	Poor	Poor	Hedgerow - maintained Gaps present	No Work Recommended	1.8	C1	N/A

Stem Diameter - This is the measurement of stem diameter in millimetres taken in accordance with Annex C of BS5837:2012. # - estimated Branch Spread -This is taken at four cardinal points, with a stated value in metres to enable an accurate representation of the crown

First Significant Branch -Height of first significant branch and direction of growth e.g. 2.4 N, measured from adjacent ground level.

Existing Height Above Ground Level -An approximation of height (in metres) of crown clearance above adjacent ground level.

Life Stage -There are five classes to which trees are assigned: Young; Early Mature; Mature; Over Mature; Veteran.

Physiological Condition -An indication of the tree's physiological condition is represented and classed as good, fair, poor or dead, this is informed by the following: Canopy Density: It should be taken that, unless otherwise stated with each individual entry, the canopy density of the trees is typical of the species; and Leaf Size and Colouration: It should be taken that, unless otherwise stated with each individual entry, leaf size and colouration is typical of the species.

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Sequential Reference Number -T - Individual specimen; G - Group, Trees that form cohesive arboricultural features either aerodynamically, visually or culturally; H - Linear group of specimens that form a hedge or boundary; W - A larger group or area of trees that should be regarded as a single woodland unit.

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Estimated Remaining Contribution -The definitions of the terms used are as follows and describe the estimated length of time (in years) over which the tree can be expected to make a safe contribution to local amenity: Less than 10; 10+; 20+; and 40+.

Sequential			Stem		Branch S	pread (m)		Canopy		Physiological					Category	
Reference No.	Species	Height (m)	Diameter (mm)	North	East	South	West	Clearance (m)	Life Stage	Condition	Structural Condition	Comments / Notes	Recommendations	RPA Radius (m)	Grading	Priority
T24	Sycamore (Acer pseudoplatanus)	7	# 80 80	2	2	2	2	4	Semi Mature	Poor		Branch stubs Branches - Broken Epicormic growth at the base Pruning wounds Stem - twin	No Work Recommended	1.4	C1	N/A
T25	Sycamore (Acer pseudoplatanus)	7	# 80 80 80	2	2	2	2	4	Semi Mature	Poor	Poor	Branch stubs Branches - Broken Epicormic growth at the base Pruning wounds Stem - twin	No Work Recommended	1.7	C1	N/A
H26	Elder (Sambucus nigra) English Elm (Ulmus procera) Norway Maple (Acer platanoides)	1.8	# 6x60	1.5	1.5	1.5	1.5	0	Early Mature	Poor	Poor	Hedgerow - maintained Gaps present	No Work Recommended	1.8	C1	N/A
T27	English Oak (Quercus robur)	20	1110	10	10	10	5	2	Mature	Good	Good	Branches - Broken Branch stubs Minor deadwood No obvious defects Typical crown form for the species	No Work Recommended	13.3	A1	N/A
T28	English Oak (Quercus robur)	20	1110	10	5	10	10	2	Mature	Good	Good	Branches - Broken Branch stubs Minor and major deadwood No obvious defects Typical crown form for the species	No Work Recommended	13.3	A1	N/A
T29	Common Ash (Fraxinus excelsior)	8	350	4	4	4	4	1	Semi Mature	Fair	Fair	Branches - Broken Branch stubs No obvious defects Typical crown form for the species	No Work Recommended	4.2	B1	N/A
T30	English Elm (Ulmus procera)	4	# 100	1.5	1.5	1.5	1.5	1	Semi Mature	Fair	Fair	Branches - Broken Branch stubs No obvious defects Typical crown form for the species	No Work Recommended	1.2	C1	N/A
T31	Field Maple (Acer campestre)	5	# 180	3	3	3	3	1	Semi Mature	Fair	Fair	Branches - Broken Branch stubs No obvious defects Typical crown form for the species	No Work Recommended	2.2	C1	N/A
T32	Field Maple (Acer campestre)	5	# 180	4	2	4	2	1	Semi Mature	Fair	Fair	Branches - Broken Branch stubs No obvious defects Typical crown form for the species Flail damage to the western side	No Work Recommended	2.2	C1	N/A
H33	Elder (Sambucus nigra) English Elm (Ulmus procera) Field Maple (Acer campestre) Hawthorn (Crataegus monogyna)	1.8	# 6x60	1.5	1.5	1.5	1.5	0	Early Mature	Poor	Poor	Hedgerow - maintained Gaps present	No Work Recommended	1.8	C1	N/A
T34	Common Ash (Fraxinus excelsior)	10	360	5	5	5	5	2	Semi Mature	Fair	Fair	Branches - Broken Branch stubs Compacted ground at the base Located outside the site Minor deadwood No obvious defects Pruning wounds Typical crown form for the species	No Work Recommended	4.3	B1	N/A

Stem Diameter - This is the measurement of stem diameter in millimetres taken in accordance with Annex C of BS5837:2012. # - estimated

Branch Spread -This is taken at four cardinal points, with a stated value in metres to enable an accurate representation of the crown

First Significant Branch -Height of first significant branch and direction of growth e.g. 2.4 N, measured from adjacent ground level.

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Estimated Remaining Contribution -The definitions of the terms used are as follows and describe the estimated length of time (in years) over which the tree can be expected to make a safe contribution to local amenity: Less than 10; 10+; 20+; and 40+.

			Stem		Branch S	Spread (m)				Ph i . i i					0.1.1.1	
Sequential Reference No.	Species	Height (m)	Diameter (mm)	North	East	South	West	Canopy Clearance (m)	Life Stage	Physiological Condition			Recommendations	RPA Radius (m)	Category Grading	Priority
T35	Common Ash (Fraxinus excelsior)	10	390	5	5	5	5	2	Semi Mature	Fair	Fair	Branches - Broken Branch stubs Compacted ground at the base Located outside the site Minor deadwood No obvious defects Pruning wounds Typical crown form for the species	No Work Recommended	4.7	B1	N/A
T36	Common Ash (Fraxinus excelsior)	10	430	5	5	5	5	2	Semi Mature	Fair	Fair	Branches - Broken Branch stubs Compacted ground at the base Located outside the site Minor deadwood No obvious defects Pruning wounds Typical crown form for the species	No Work Recommended	5.2	B1	N/A
Т37	Common Ash (Fraxinus excelsior)	10	440	5	5	5	5	2	Semi Mature	Fair	Fair	Bark wound on the north side of the stem - minor Branches - Broken Branch stubs Compacted ground at the base Located outside the site Minor deadwood No obvious defects Pruning wounds Typical crown form for the species Woodpecker hole at the top of the bark wound	No Work Recommended	5.3	C1	N/A

Stem Diameter - This is the measurement of stem diameter in millimetres taken in accordance with Annex C of BS5837:2012. # - estimated

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## Appendix EDP 2 Schedule EDP 2 Tree Constraints Schedule

#### **Parcel A**

Reference	Cat	No of	RPA	RPA	Ultimate	Ultim	ate Crowr	n Spread	(m)
No.	Grading	Stems	Radius (m)	Area m <sup>2</sup>	Height (m)	N	E	s	w
H1	B1	6	1.8	9.8	3	2	2	2	2
T2	B1	2	7.3	169.6	19	7	7	7	7
G3	C1	1	2.2	14.7	10	5	5	5	5
T4	B1	1	12.0	452.4	25	10	10	10	10
H5	B1	6	1.8	9.8	3	1	1	1	1
H6	C1	6	1.8	9.8	3	1	1	1	1
T7	C1	1	2.0	13.1	6	4	4	4	4
T8	C1	1	2.0	13.1	6	4	4	4	4
T9	B1	1	3.4	35.5	11	2	5	5	5
T10	B1	1	3.0	28.3	10	6	6	1	6
T11	B1	1	3.0	28.3	6	6	6	6	6
T12	C1	1	1.4	6.5	5	4	4	4	4
T13	B1	1	9.6	289.5	16	8	8	8	8
T14	B1	1	3.7	43.5	13	6	6	2	6
T15	B1	1	3.6	40.7	13	4	6	6	6
T16	B1	1	3.6	40.7	13	6	6	4	6
T17	C1	1	1.4	6.5	5	2	2	2	2
T18	C1	1	1.4	6.5	5	2	2	2	2
T19	B1	1	4.3	58.6	13	6	6	6	6
T20	C1	2	1.4	6.2	5	3	3	3	3
T21	C1	6	2.9	27.1	9	6	2	4	2
G22	C1	6	2.9	27.1	10	5	5	5	5
H23	C1	6	1.8	9.8	2	2	2	2	2
T24	C1	2	1.4	5.8	9	2	2	2	2
T25	C1	3	1.7	8.7	9	2	2	2	2
H26	C1	6	1.8	9.8	2	2	2	2	2
T27	A1	1	13.3	557.4	25	12	12	12	6
T28	A1	1	13.3	557.4	25	12	6	12	12
T29	B1	1	4.2	55.4	10	5	5	5	5
T30	C1	1	1.2	4.5	5	2	2	2	2
T31	C1	1	2.2	14.7	6	4	4	4	4
T32	C1	1	2.2	14.7	6	5	2	5	2
H33	C1	6	1.8	9.8	2	2	2	2	2
T34	B1	1	4.3	58.6	13	6	6	6	6

Reference	Cat	No of	RPA	RPA	Ultimate	Ultimate Crown Spread (m)					
No.	Grading	Stems	Radius (m)	Area m²	Height (m)	N	E	S	w		
T35	B1	1	4.7	68.8	13	6	6	6	6		
T36	B1	1	5.2	83.6	13	6	6	6	6		
T37	C1	1	5.3	87.6	13	6	6	6	6		

### Parcel B

Reference	Cat	No of	RPA	RPA	Ultimate	Ultim	ate Crown	Spread	(m)
No.	Grading	stems	Radius (m)	Area m <sup>2</sup>	Height (m)	N	Е	S	W
T38	B1	1	7.3	168.3	15	8	8	8	8
T39	C1	3	3.2	31.4	18	5	5	5	5
T40	C1	1	8.4	221.7	23	12	12	12	12
G41	C1	6	2.0	12.9	5	4	4	4	4
T42	B1	1	9.4	275.2	23	12	12	12	4
T43	C1	1	7.7	185.3	23	11	4	11	4
T44	C1	1	9.2	268.2	23	5	6	10	11
T45	C1	1	4.8	72.4	15	5	1	5	10
T46	C1	2	1.7	9.0	13	5	5	2	4
T47	B1	1	9.6	289.5	15	7	7	7	7
T48	B1	1	15	706.9	20	12	12	12	12
T49	C1	6	2.6	22.0	8	5	5	5	5
H50	C1	6	1.8	9.8	5	2	2	2	2
G51	B1	1	2.2	14.7	10	4	4	4	4
T52	C1	6	1.8	9.8	5	2	2	2	2
T53	B1	1	15	706.9	13	8	8	8	8
T54	B1	1	12.0	452.4	19	12	12	12	12
G55	C1	6	2.1	13.3	6	2	2	2	2
T56	B1	1	2.4	18.1	10	5	5	5	5
G57	C1	6	1.8	9.8	6	4	4	4	4

### **Plans**

**Plan EDP 1** Site Location and Site Boundaries

(edp6100\_d006b 13 August 2020 GY/JW)

Plan EDP 2 Environmental Planning Context

(edp6100\_d007b 13 August 2020 GY/JW)

Plan EDP 3 Phase 1 Habitat Plan

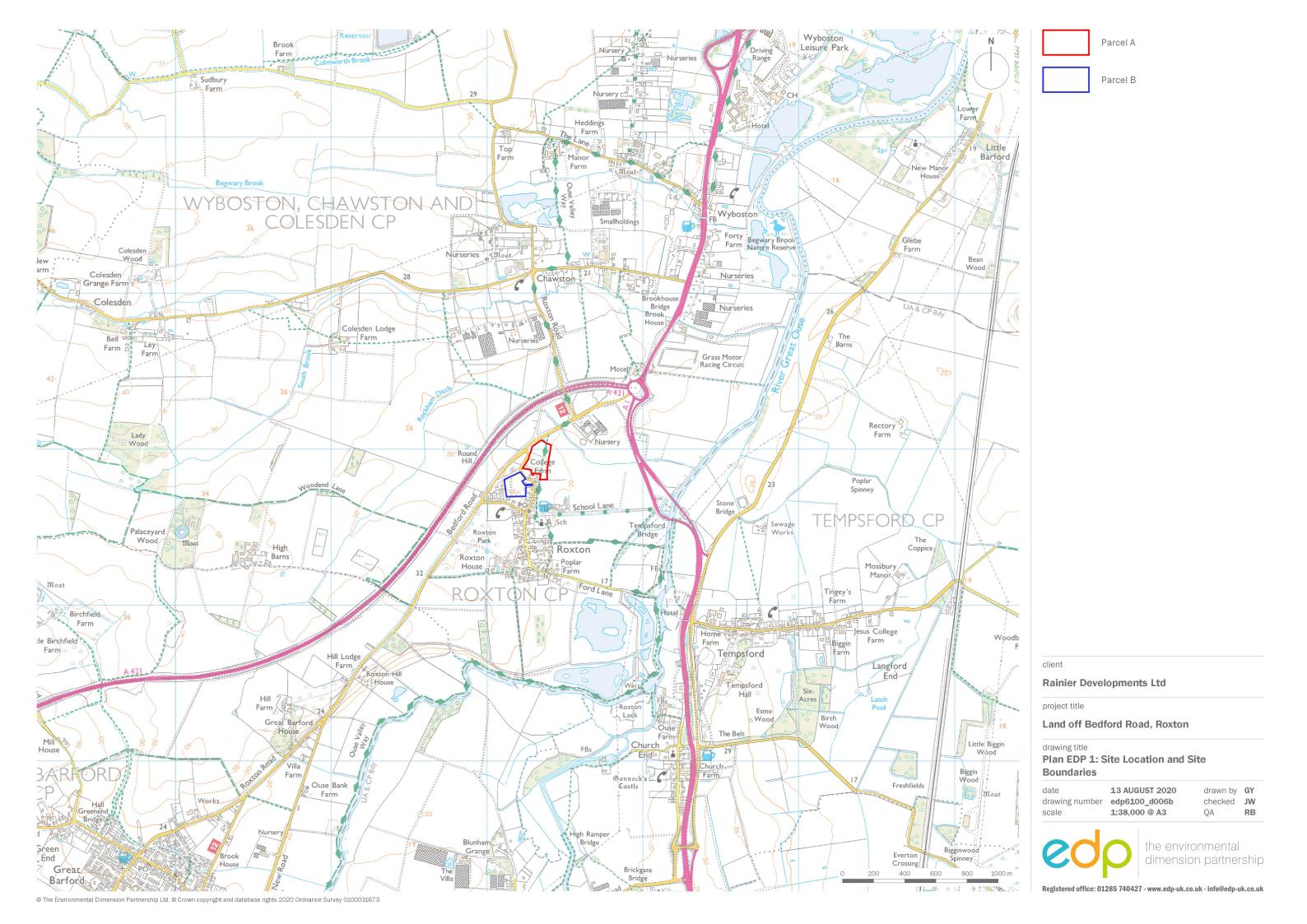
(edp6100\_d001b 13 August 2020 ME/RB)

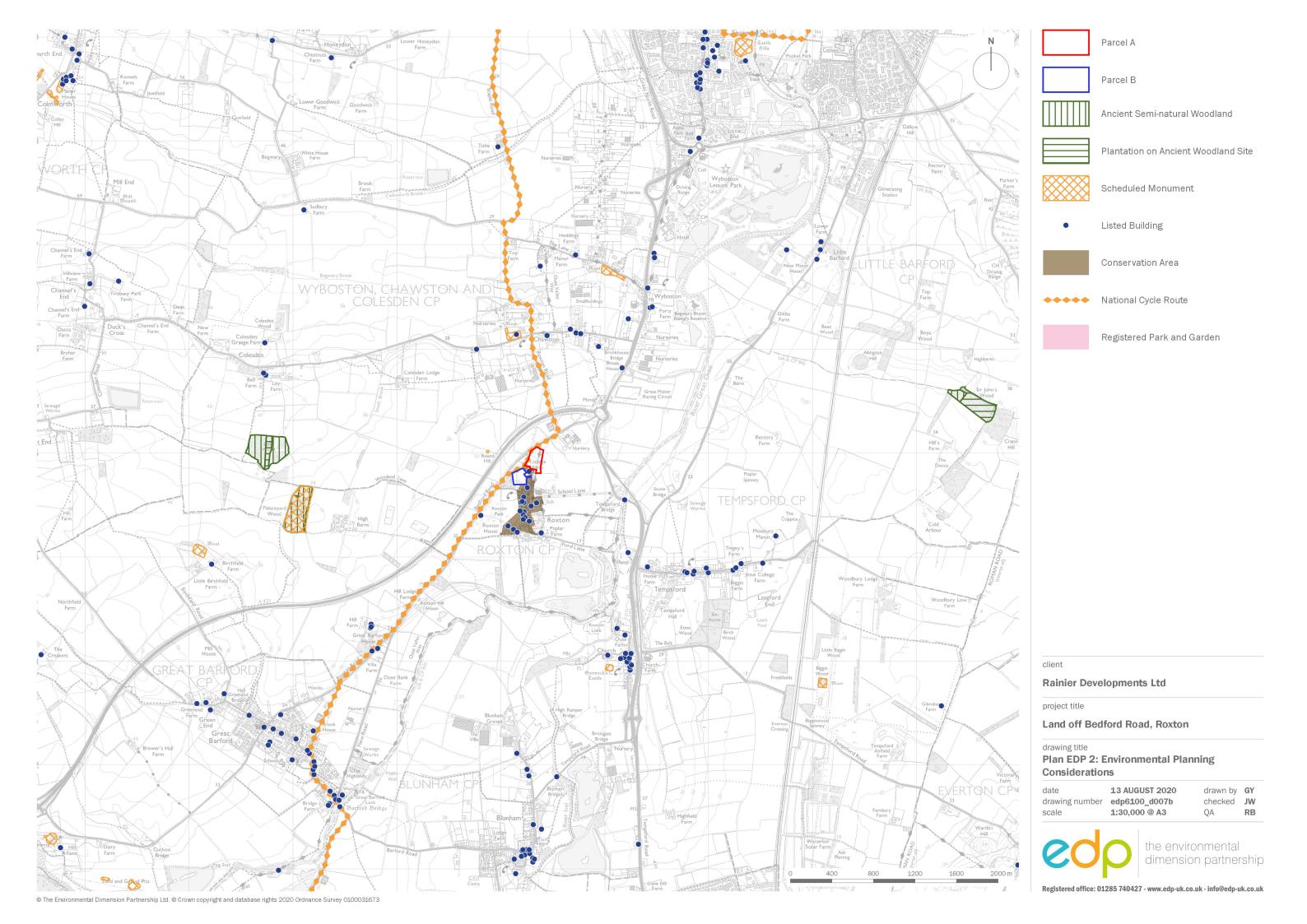
Plan EDP 4 Tree Constraints Plan

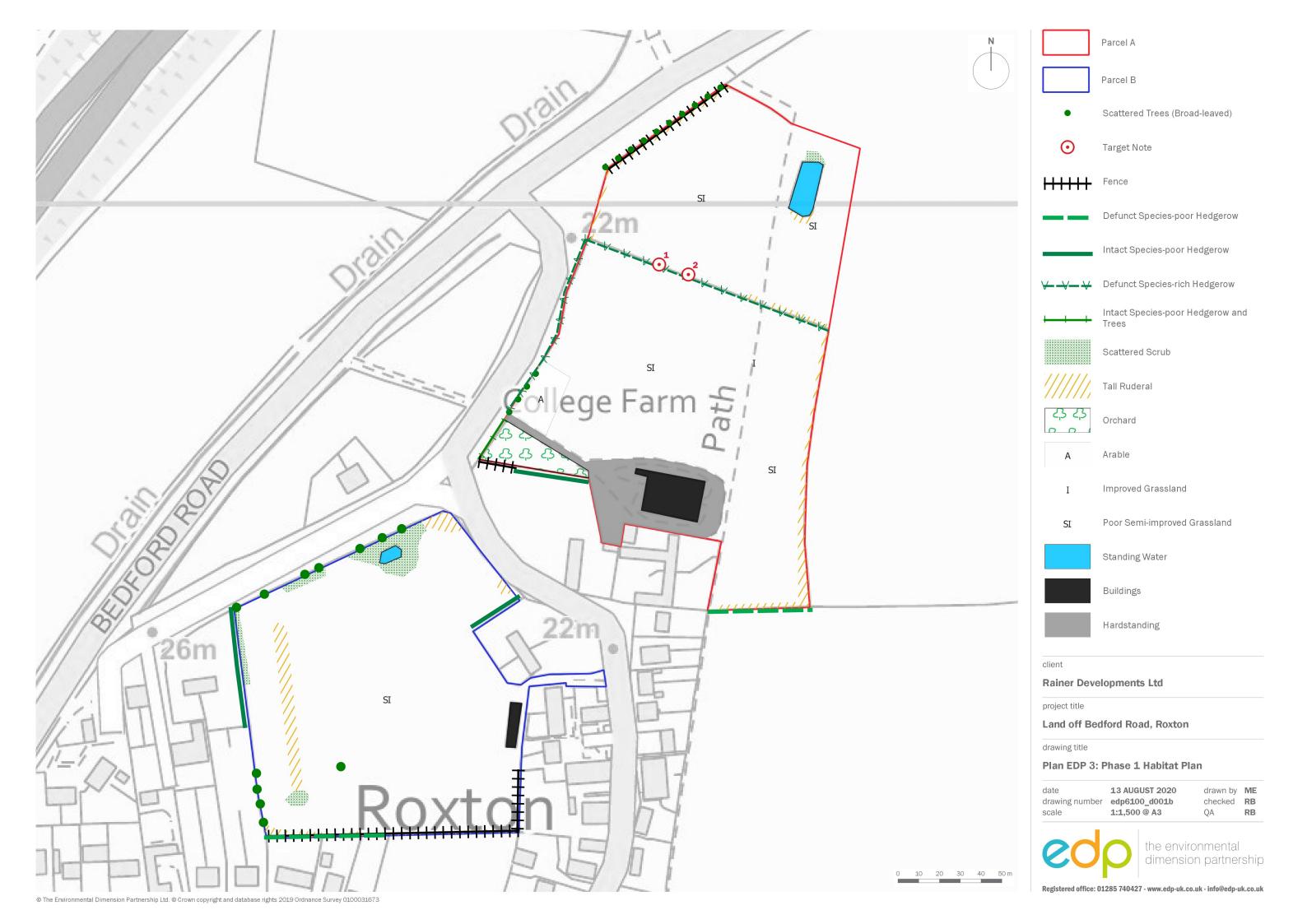
(edp6100\_d012b 13 August 2020 GY/TR)

Land off Bedford Road, Roxton Representations in Respect of Ecological, Landscape, Heritage and Arboricultural Circumstances edp6100\_r005b

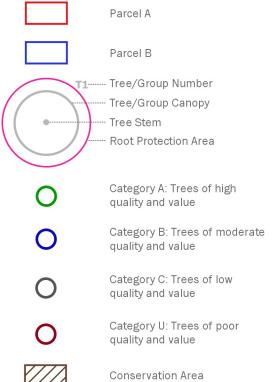
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#### **Rainier Developments Ltd**

project title

Land off Bedford Road, Roxton

drawing title

Plan EDP 4: Tree Constraints Plan

 date
 13 AUGUST 2020
 drawn by checked
 GY

 drawing number scale
 edp6100\_d012b
 checked
 TR

 1:1,500 @ A3
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