

masterplanning environmental assessment

landscape design

ecology

architecture

graphic design

Our ref: 9776 / DDJR /AJB

Caroline Ford Principal Planning Officer – Major Projects Planning Team Development Management Division Place and Growth Directorate Cherwell District Council

York Biotech Campus Sand Hutton York YO41 1LZ

Tel: 01904 406112 mail@fpcr.co.uk www.fpcr.co.uk

25th June 2021

Dear Caroline,

RE: HIMLEY VILLAGE PHASE 1, NORTHWEST BICESTER

This letter has been produced in order to assist in the discharge of condition 10 of granted outline consent for Himley Village (reference 14/02121/OUT). This condition requires that each reserved matters application be accompanied by 'a statement setting out how the proposed development will contribute to achieving the Biodiversity Strategy and net biodiversity gain.'

This statement should be read in conjunction with the Biodiversity Strategy (Rev C June 2021) produced by FPCR which was produced following consultation with Charlotte Watkins, the Ecologist at Cherwell District Council.

This phase of Himley village incorporates ecological enhancement in order to align with two broad ecological requirements of the overarching scheme –

- A requirement for the development to achieve a 'net gain' in biodiversity as set out in the NPPF;
- The requirement for the scheme to be able to proceed lawfully with respect to protected species, in particular Great Crested Newt.

<u>Net gain</u>

The Biodiversity Strategy was accompanied by a Biodiversity Impact Assessment (BIA) which assessed the anticipated net gain / loss in biodiversity units anticipated based on the submitted masterplan, and the baseline established during Phase 1 Habitat Survey (2021). This demonstrated that there is enough scope for incorporation on meaningful biodiversity enhancements on the site to achieve a net gain in habitat units of 2.54%.

A detailed BIA has also been carried out on the phase 1 proposals, which is appended to this report. This shows that proposed habitat is managed appropriately, the first phase is capable of achieving a net gain of 8.18% habitat units, and 0.53% hedgerow units. A detailed Landscape & Habitat

FPCR Environment and Design Limited. Registered in England No: 7128076. Registered Office: Lockington Hall, Lockington, Derby DE74 2RH

Details of Directors and Associates are available on our website.

Offices also at Lockington Hall, Lockington, Derby DE74 2RH Tel: 01509 672772 Addlepool Business Centre, Clyst St George, Exeter, Devon EX3 0NR Tel: 01392 874499 and Studio 2 Dunley Hill Court, Dunley Hill Farm, Ranmore, Dorking, Surrey RH5 6SX Tel: 01483 282523





Management Plan will be produced to support this assessment prior to the commencement of each phase of development, to discharge condition 29 of the outline consent.

Future phases of the development will be subject to separate BIAs.

Great Crested Newts

It is intended to enter the phase 1 scheme into the District Level Licencing (DLL) Scheme run by NatureSpace. Extensive liaison between FPCR ecologists and Rowan Avery of NatureSpace have led to the incorporation of additional aquatic and terrestrial habitat to the masterplan which will ensure the continued viability of the onsite GCN population, whilst also ensuring the range of the species is maintained in the local landscape.

Details of habitat management and on-site provisions to ensure the favourable conservation status of GCN will be detailed as part of the DLL licence application, and subsequently delivered as a condition of planning.

Additional phases of the development will be subject to separate DLL applications, and the masterplan has been modified to ensure that suitable habitat is available to allow the entry of future phases on to the scheme.

Yours sincerely

Daniel Ross BSc (Hons) Senior Ecologist FPCR Environment and Design Ltd

Daniel.ross@fpcr.co.uk

fpcr

Appendix A – Biodiversity Impact Assessment (BIA) – Himley Phase 1



May 2021

Biodiversity Impact Assessment Report

9776 – Himley Village, Bicester (Phase 1 Site)

FPCR Environment and Design Ltd. were commissioned by Countryside Properties Ltd. undertake a biodiversity offsetting assessment of the Landscape Masterplan (P20-3215 14 Rev E) and site layout plan (P20-3215_12_01) for the proposed first phased development of Himley Village, Bicester.

This report summarises the calculations and provides details regarding any assumptions made to inform this assessment.

Background

Current proposals for site comprise the development of up to 500 residential dwellings (Class C3). Such development to include provision of strategic landscape, provision of new vehicular, cycle and pedestrian access routes, infrastructure and other operations (including demolition of farm buildings on Middleton Stoney Road).

Methodology

The BIA calculations completed on the scheme have been calculated in accordance with the DEFRA Biodiversity Metric 2.0 Calculation Tool Beta Test Final.

Results of the phase 1 habitat survey undertaken in 2020 and 2021 by FPCR Environment & Design Ltd were used for this assessment.

The development site was mapped and divided into existing habitat criteria. Habitats were defined using the UK Habitat Classification with further information providing habitat area, distinctiveness and condition, which are used to calculate the value of each habitat.

The condition assessments were undertaken using the relevant Condition Assessment Criteria within the DEFRA Biodiversity Metric 2.0 Technical Supplement, Beta Edition¹.

Full details of the calculation methodology are provided in Biodiversity Metric 2.0 - User Guide².

¹ I. Crosher, S. Gold, M. Heaver et al. (2019) The Biodiversity Metric 2.0: Auditing and accounting for biodiversity value: technical supplement (Beta version, July 2019). Natural England. Online. Available at: http://publications.naturalengland.org.uk/publication/5850908674228224 [Accessed 14.12.20]

² I. Crosher, S. Gold, M. Heaver et al. (2019) The Biodiversity Metric 2.0: Auditing and accounting for biodiversity value: User Guide (Beta version, July 2019). Natural England. Online. Available at:

http://publications.naturalengland.org.uk/publication/5850908674228224 [Accessed 14.12.20]

Biodiversity Impact Assessment (BIA)

Existing Habitats

As identified by phase 1 habitat surveys undertaken in 2020 and 2021, the site was dominated by arable land. Other habitats included building, hardstanding, garden, two ponds, orchard, broadleaved plantation woodland, scattered trees and improved grassland

The biodiversity units for each habitat on the site have been calculated and are presented in Table 1. Justifications for condition scores are detailed below.

| Habitat | BIA Habitat Type | Area (ha) | Condition | Biodiversity Units | Area Retained (ha) | Area Enhanced (ha) | Area Lost (ha) |
|---------------------------------------|--|--------------|-----------------------|-----------------------|--------------------------|--------------------------|----------------------|
| Arable | Cropland – Cereal crops | 22.91 | N/A - Agricultural | 45.82 | 0 | 0 | 22.91 |
| Improved Grassland | Grassland – Modified grassland | 0.04 | Poor | 0.08 | 0 | 0 | 0.04 |
| Dense / Continuous scrub | Heathland and shrub – Mixed scrub | 0.04 | Poor | 0.16 | 0.04 | 0 | 0 |
| Hardstanding | Urban – Developed land; sealed surface | 0.21 | N/A - Other | 0 | 0 | 0 | 0.21 |
| Buildings | Urban – Developed land; sealed surface | 0.1 | N/A - Other | 0 | 0 | 0 | 0.1 |
| Broadleaved Plantation Woodland | Woodland and forest – Other woodland; broadleaved | 0.42 | Poor | 1.68 | 0 | 0.42 | 0 |
| Gardens (Lawn and Planting) | Urban – Vegetated garden | 0.04 | Poor | 0.08 | 0 | 0 | 0.04 |
| Orchard | Urban - Orchard | 0.06 | Poor | 0.24 | 0 | 0 | 0.06 |
| Ponds | Lakes – Ponds (Priority Habitat) | 0.07 | Moderate | 0.84 | 0.07 | 0 | 0 |
| Scattered Trees | Woodland and forest – Other woodland; broadleaved | 0.15 | Poor | 0.60 | 0.15 | 0 | 0 |
| Totals: | | | | 49.50 | 0.26 | 0.42 | 23.27 |

Table 1: Biodiversity Units: Existing On-Site Habitats

Arable (Cropland – Cereal crops)

No assessment is required.

Improved Grassland (Grassland – Modified grassland)

A small number of parts of improved grassland field parcels separated by fence lines were present within the north of the boundary. At the time of survey, a number of these were horse grazed and other horse grazed on a rotational basis.

DEFRA 2.0 Condition Assessment – Grassland Habitat Types

| Condition Assessment Feature | Assessment |
|--|--|
| 1. The area is clearly and easily recognisable as a good example of this type of habitat and there is little difference between what is described in the relevant habitats classifications and what is visible on site. | Yes – area is clearly recognisable and corresponds to what is described. |
| 2. The appearance and composition of the vegetation on site should very closely match the characteristics for the specific Priority Habitat [i.e., as described by either the Phase 1 habitat Classification of the UK Habitat Classification], with species typical of the habitats representing a significant majority of the vegetation. | No – due to the management we assume no characteristics as a priority habitat. |
| 3. Wildflowers, sedges and indicator species for the specific Priority grassland habitat are very clearly and easily visible throughout the sward and occur at high densities in high frequency. | No – due to the management we assume none to be present. |
| 4. Undesirable species and physical damage is below 5% cover | No – due to the management we assume physical damage and undesirable species is above 5% of the area. |
| 5. Cover of bare ground less than 10% (including localised areas, for example, rabbit warrens). | Yes – no extensive areas of bare ground identified from satellite imagery. |
| 6. Cover of bracken is less than 20% and cover of scrub and bramble habitats is less than 5%. | Yes – due to the management we assume very little bracken or scrub to be present. |

In accordance with the guidance provided within the Technical Supplement the grassland fails three of the six condition criteria and the condition criteria has been set at 'Poor'.

Grassland surveys undertaken in 2010 in order to support the outline planning application identified none of the grasslands within the site would we classified as Section 41 (NERC Act) habitats.

Dense/Continuous Scrub (Heathland and Shrub - Mixed Scrub)

A small area of dense/continuous scrub were present located to the west of pond P2.

DEFRA 2.0 Condition Assessment - Scrub Habitat Type

| Condition Assessment Feature | Assessment |
|--|--|
| 1. There are at least three woody species, with no one species comprising more than 75% of the cover (except common juniper, sea buckthorn or box, which can be 100% cover). | No – bramble accounts for more than 75% of cover |
| 2. There is a good age range – a mixture of seedlings, saplings, young shrubs and mature shrubs. | No – homogenous age range and structure |

| Condition Assessment Feature | Assessment |
|--|--|
| 3. Pernicious weeds and invasive species make up less than 5% of the ground cover. | Yes |
| 4. The shrub has a well-developed edge with un-grazed tall herbs. | Yes |
| 5. There are many clearings and glades within the scrub. | No – scrub area is too small and is too dense for clearings and glades to form |

In accordance with the guidance provided within the Technical Supplement the stand is not indicative of scrub of high environmental value and fails to meet three of five criteria so is classified as 'Poor'.

Buildings and Hardstanding (Urban – Developed Land; sealed surface)

No assessment is required.

Broadleaved Plantation Woodland (Woodland and forest - Other woodland, broadleaved)

Part of a single strip of broadleaved woodland had recently been established (c.25-35 years ago as noted by previous survey work) along the eastern site boundary. Previous survey work has noted a diverse mix of native broadleaved species and a ground flora layer dominated by common grasses and ruderal herbs associated with nutrient rich soils. The woodland did not support a diverse or valuable ground flora and none of the woodlands would be classified as Section 41 (NERC Act) habitat.

| Condition Assessment Feature | Assessment |
|--|---|
| 1. This should be an area of trees with complete canopy cover. | No – Phase 1 survey identified non- complete canopy cover. |
| 2. Native species are dominant. Non-native and invasive species account for less than 10% of the vegetation cover | Yes – species lists from previous survey work and 2021 survey work indicate no non-native or invasive tree species planting. |
| 3. A diverse age and height structure of the trees. | No – all tree species planted at the same time. |
| 4. Free from damage [Bark stripping; Browse line; Damage shoot tips] (in the last five years) from stock or wild mammals with less than 20% of vegetation being browsed. | Yes – woodland is fenced off. |
| 5. There should be evidence of successful (i.e. not browsed off before it gets well established) tree regeneration such as seedlings, saplings and young trees | No - no evidence of a seedling / sapling layer identified. |
| 6. Standing and fallen dead wood of over 20 cm diameter are present including fallen large dead branches/stems and stumps. | No –no evidence of deadwood identified. |
| 7. Wetland habitat if they exist within the wood has little sign of drainage or channel straightening. | No – no wetland habitats identified. |

DEFRA 2.0 Condition Assessment – Woodland Types

| Condition Assessment Feature | Assessment |
|---|--|
| 8. The area is protected from damage by agricultural and other adjacent operations | Yes – woodland is fenced off. |
| 9. There should be no evidence of inappropriate management (e.g. deep ruts, animal poaching or compaction). | Yes – woodland is fenced off. |
| 10. Invasive non-native plants are below 5% (see list below). | Yes – species lists from 2021 survey and previous survey work indicate no non-native or invasive tree species planting. |
| 11. No signs of significant nutrient enrichment present. | No – 2021 survey and previous surveys report ground layer typical of nutrient enriched soils. |
| 12. More than 3 different native trees and 3 shrub species in an average 10 m radius. | Yes – 2021 survey and previous survey reports this is a diverse mix of native broadleaved trees and shrubs. |

In accordance with the guidance provided within the Technical Supplement the broadleaved plantation woodland fails to meet six of twelve criteria so is classified as 'Poor'.

Gardens (Urban – Vegetated garden)

No assessment is required.

Orchard (Urban - Orchard)

A small garden orchard supporting a number of fruiting tree species was present within the south of the site.

DEFRA 2.0 Condition Assessment – Orchard Habitat Type

| Condition Assessment Feature | Assessment |
|---|--|
| 1. There should be between 50 and 150 fruit or nut trees per hectare. | Yes |
| 2. There should be an absence of scrub growing between or up the trees. | No – orchard is currently unmanaged as a result of dwelling adjacent associated with the ownership now uninhabited. Scrub species identified within the orchard. |
| 3. At least 80% of the trees should be free from damage caused by browsing, bark stripping or rubbing on non-adjusted ties. | Yes – no evidence of any of these. |
| 4. The average height of the grass should be between 5cm and 30cm. | No – due to lack of management the grass sward is more than 30cm. |
| 5. There should be less than 5% cover of bare ground, injurious weeds or scrub. | No – due to lack of management, scrub cover is more than 5%. |

In accordance with the guidance provided within the Technical Supplement the orchard fails to meet three of five criteria so is classified as 'Poor'.

Ponds (Lakes - Ponds (Priority Habitat)

Two ponds were present within the site. Pond P1 and P2 was surveyed in 2020 as part of the extended phase 1 habitat survey.

DEFRA 2.0 Condition Assessment – Pond Habitat Type

| Condition Assessment Feature | Asses | sment |
|--|--------------------------------------|--------------------------------------|
| | Pond P1 | Pond P2 |
| 1. Are of good water quality, with clear water (substrate can be seen) and no obvious sign of pollution in the water body. | No – substrate cannot be seen | No – substrate cannot be seen |
| 2. The water body should have semi natural riparian land for at least 10m from the pond edge. | No – less than 10m | No – less than 10m |
| 3. Non-woodland ponds should be dominated by plants, be they submerged or floating (not dominance of duckweed is a sign of eutrophication). | No – woodland pond | No – woodland pond |
| 4. Non-woodland ponds [i.e. that have always been open] should not be shaded more than 50%. | No – woodland pond | No – woodland pond |
| 5. Many ponds will be fishless, those which naturally contain fish should not be stocked and should contain a native fish assemblage. | Yes – no evidence of fish present | Yes – no evidence of fish present |
| 6. Ponds should not be artificially connected to other waterbodies, e.g. ditches. | No – connected to a ditch | Yes – no connection |
| 7. Pond water levels should be able to fluctuate naturally throughout the year. | Yes | Yes |
| 8. Non-native species should be absent. | Yes | Yes |
| 9. Less than 10% of the pond should be covered with duckweed or filamentous algae. | Yes | Yes |

In accordance with the guidance provided within the Technical Supplement the ponds fail to meet a number of criteria so are classified as 'Moderate'.

Scattered Trees (Woodland and forest - Other woodland, broadleaved)

A small area of scattered trees was present located to the west of pond P2, located within a corner of an arable field.

| DEFRA 2.0 Condition Assessment - Woodland Types |
|---|
|---|

| Condition Assessment Feature | Assessment |
|--|-----------------------------------|
| 1. This should be an area of trees with complete canopy cover. | No – not a complete canopy cover. |

| Condition Assessment Feature | Assessment |
|--|---|
| Native species are dominant. Non-native and invasive species account for less than 10% of the vegetation cover | Yes |
| 3. A diverse age and height structure of the trees. | No |
| 4. Free from damage [Bark stripping; Browse line; Damage shoot tips] (in the last five years)from stock or wild mammals with less than 20% of vegetation being browsed. | Yes – none evident |
| 5. There should be evidence of successful (i.e. not browsed off before it gets well established) tree regeneration such as seedlings, saplings and young trees | No |
| 6. Standing and fallen dead wood of over 20 cm diameter are present including fallen large dead branches/stems and stumps. | Yes – some deadwood present |
| 7.Wetland habitat if they exist within the wood has little sign of drainage or channel straightening. | No – none present |
| 8.The area is protected from damage by agricultural and other adjacent operations | No – no protected barriers present. |
| 9.There should be no evidence of inappropriate management (e.g. deep ruts, animal poaching or compaction). | No – former badger sett identified now utilised as a rabbit warren |
| 10.Invasive non-native plants are below 5% (see list below). | Yes |
| 11.No signs of significant nutrient enrichment present. | No – ground layer vegetation evident of nutrient enrichment |
| 12.More than 3 different native trees and 3 shrub species in an average 10 m radius. | No – not enough tree cover |

In accordance with the guidance provided within the Technical Supplement the woodland fails to meet a number of criteria so is classified as 'Poor'.

Hedgerows

| DEFRA 2.0 Condition Assessment – Hedgerow favourable condition attributes |
|---|
|---|

| Attributes and functional groupings (A, B, C & D) | Criteria (the minimum requirements for 'favourable condition' | Assessment |
|---|--|---|
| A1. Height | >1.5 m average along length | Pass – All hedgerows |
| A2. Width | >1.5 m average along length | Pass – All Hedgerows |
| B1. Gap – hedge base | Gap between ground and base of canopy 90% of length (unless 'line of trees') | Pass – H1, H4 Fail – H2, H3, H5, H6, H7 |

| Attributes and functional groupings (A, B, C & D) | Criteria (the minimum requirements for 'favourable condition' | Assessment |
|---|--|---|
| B2. Gap - hedge canopy continuity | Gaps make up <10% of total length No canopy gaps >5m | Pass – H1, H4 Fail – H2, H3, H5, H6, H7 |
| C1. Undisturbed ground and perennial vegetation | >1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length measured from outer edge of hedgerow, and is present on one side of the hedge (at least) | Pass – H3 Fail – H1, H2, H4, H5, H6, H7 |
| C2. Undesirable perennial vegetation | Plant species indicative of nutrient enrichment of soils dominate | Fail – All hedgerows |
| D1. Invasive and neophyte species | >90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species | Fail – All hedgerows |
| D2. Current damage | >90% of the hedgerow or undisturbed ground is free of damage caused by human activities | Pass – All hedgerows |

The site has a total of 2.45km of hedgerows, accounting for a hedgerow baseline value of 16.89 units.

2.24km of hedgerow is likely to be retained., accounting for 13.5 units.

0.21km of hedgerow is to be lost, accounting for 15.44 units.

Hedgerows H1, H3 and H4 were assessed as 'moderate condition'. Hedgerows H2, H5, H6 and H9 were assessed as 'poor condition'.

Habitat Creation and Enhancement (Figure 1)

The following section outlines the key habitats to be created on site and provides the evidence for the condition scores they receive within the metric calculations. Proposed habitats within plots are included within the figures but have been listed under separate headings to allow for easier traceability.

All enhanced and created habitats will be subject to long term management in accordance to a management plan.

The proposed onsite mitigation and their conditions are presented in Table 2.

| Table 2: Biodiversity Units: Proposed Created, Retained and Enhanced On-site Habitats and |
|---|
| Target Conditions |

| Habitat | BIA Habitat | Area (ha) | Target Condition | Biodiversity Units |
|--|---|--------------|---------------------|-----------------------|
| Broadleaved plantation woodland (Enhanced) | Woodland and forest – Other woodland; broadleaved | 0.42 | Poor to Moderate | 2.34 |
| Ponds (Retained) | Lakes – Ponds (Non-Priority Habitat) | 0.07 | Moderate | 0.84 |

| Habitat | BIA Habitat | Area (ha) | Target Condition | Biodiversity Units |
|--|---|--------------|---------------------|-----------------------|
| Dense/Continuous Scrub (Retained) | Heathland and shrub – Mixed scrub | 0.04 | Poor | 0.16 |
| Scattered Trees (Retained) | Woodland and forest – Other woodland; broadleaved | 0.15 | Poor | 0.60 |
| Attenuation basins/swales | Urban – Sustainable urban drainage feature | 0.56 | Moderate | 1.35 |
| Amenity Grassland | Urban – Amenity Grassland | 2.21 | Poor | 4.27 |
| Dwellings and Associated Hardstanding | Urban – Developed land, sealed surface | 5.33 | N/A - Other | 0 |
| Gardens | Urban – Vegetated garden | 5.78 | Poor | 11.16 |
| Newt Area | Heathland and shrub – Mixed scrub | 0.84 | Good | 7.86 |
| Road / Pavement Network | Urban – Developed land, sealed surface | 4.24 | N/A - Other | 0 |
| Semi-Improved Grassland | Grassland – Other neutral grassland | 3.78 | Moderate | 21.18 |
| Mixed Scrub | Heathland and shrub – Mixed scrub | 0.53 | Moderate | 3.81 |
| | | | Total | 49.16 |

Broadleaved Plantation Woodland (Woodland and forest - other woodland; broadleaved)

Approximately 0.42ha of the broadleaved plantation woodland located along the eastern site boundary will be retained and enhanced. The target habitat for this habitat is 'moderate'. It is considered that with appropriate management this condition can be achieved in 15 years.

| DEFRA 2.0 Condition Assessment - Woodland Type | es |
|--|----|
|--|----|

| Condition Assessment Feature | Assessment |
|--|---|
| 1. This should be an area of trees with complete canopy cover. | Yes – ever maturing woodland will create a complete canopy cover. |
| 2. Native species are dominant. Non-native and invasive species account for less than 10% of the vegetation cover | Yes – Already dominated by native species |
| 3. A diverse age and height structure of the trees. | Yes – selected felling of standards and subsequent regeneration will ensure a diverse age range and height structure. |
| 4. Free from damage [Bark stripping; Browse line; Damage shoot tips] (in the last five years) from stock or wild mammals with less than 20% of vegetation being browsed. | Yes – woodland is already fenced off and will continued to be fenced off to prevent damage arising. |

| Condition Assessment Feature | Assessment |
|---|--|
| 5. There should be evidence of successful (i.e. not browsed off before it gets well established) tree regeneration such as seedlings, saplings and young trees | Yes – management will ensure tree regeneration occurs by selective felling and encouraging seedling and saplings |
| Standing and fallen dead wood of over 20 cm diameter are present including fallen large dead branches/stems and stumps. | Yes – deadwood from selectively felled trees will be left in situ. |
| 7. Wetland habitat if they exist within the wood has little sign of drainage or channel straightening. | Yes – stepping stone ponds are proposed within the wider woodland belt. |
| 8. The area is protected from damage by agricultural and other adjacent operations | Yes – area will be continued to be fenced off |
| 9. There should be no evidence of inappropriate management (e.g. deep ruts, animal poaching or compaction). | Yes – management will ensure. |
| 10. Invasive non-native plants are below 5% (see list below). | Yes – management will ensure. |
| 6. No signs of significant nutrient enrichment present. | No – soil already shows evidence of nutrient enrichment through ground flora. Would be difficult to reverse. |
| 7. More than 3 different native trees and 3 shrub species in an average 10 m radius. | Yes – already present. |

Attenuation Basins and Swales (Urban – Sustainable Urban Drainage System)

Attenuation basins and swales are not likely to permanently hold water but may hold water for long periods of time. They will be sown with an appropriate wildflower seed mix such as Emorsgate EM8 – Meadow mixture for wetlands. With appropriate management it is considered that the artificially created and planted feature will provide a source of pollen and nectar for a wide range of invertebrates. The target condition of this habitat is set at 'Moderate' in three years.

DEFRA 2.0 Condition Assessment – Urban Habitat Types

| Condition Assessment Feature | Assessment |
|---|------------|
| 1. Known history of disturbance at the site or evidence that soil has been removed or severely modified by previous use(s) of the site. Extraneous materials/substrates such as industrial spoil may have been added which in turn has led to a low nutrient environment. | No |

| Condition Assessment Feature | Assessment |
|--|--|
| 2. The site contains some vegetation. This will comprise of early successional communities consisting mainly of stress-tolerant species (e.g. indicative of low nutrient status or drought). Early successional communities are composed of (a) annuals, or (b) mosses/liverworts, or (c) lichens, or (d) ruderals, or (e) inundation species, or (f) open grassland, or (g) flower-rich grassland, or (h) heathland. | Yes – area will include early successional communities including (a), (b), (d) and (e) |
| 3. The site contains unvegetated, loose bare substrate and pools may be present and desirable. | Yes – unvegetated areas and pools will be present as a result of semi- permanent water |
| 4. The site shows spatial variation, forming a mosaic of one or more of the early successional communities (a)–(h) above plus bare substrate or pools. | Yes |

Urban - Amenity Grassland

Amenity public open space located throughout the proposed scheme will be sown with an amenity seed mix. It is anticipated that all amenity grassland would likely be intensively managed therefore only likely to meet 'Poor' condition.

The seeded areas of amenity grassland will be sown with Emorsgate EG22 Strong Lawn and Grass Mixture.

DEFRA 2.0 Condition Assessment - Grassland

| Condition Assessment Feature | Assessment |
|---|-------------------------------|
| 1. The area is clearly and easily recognisable as a good example of this type of habitat and there is little difference between what is described in the relevant habitats classifications and what is visible on site. | No |
| 2. The appearance and composition of the vegetation on site should very closely match the characteristics for the specific Priority Habitat [i.e. as described by either the Phase 1 habitat Classification of the UK Habitat Classification], with species typical of the habitats representing a significant majority of the vegetation. | No |
| 3. Wildflowers, sedges and indicator species for the specific Priority grassland habitat are very clearly and easily visible throughout the sward and occur at high densities in high frequency. | No |
| 4. Undesirable species and physical damage is below 5% cover | Yes |
| 5. Cover of bare ground less than 10% (including localised areas, for example, rabbit warrens). | Yes – management will ensure. |

| Condition Assessment Feature | Assessment |
|---|-------------------------------|
| 6. Cover of bracken is less than 20% and cover of scrub and bramble habitats is less than 5%. | Yes – management will ensure. |

Dwellings and Associated Hardstanding, Roads and Pavements (Urban: Developed land; sealed surface (building and hardstanding)

No assessment is required.

Gardens (Urban: Vegetated garden)

No assessment is required.

Newt Area (Heathland and Shrub - Mixed Scrub) - Good condition

Extensive areas of mixed scrub are proposed within the 'Newt Area'. Due to the extensive areas of these proposed areas, the scrub is likely to achieve 'good' condition and will take approximately seven years.

DEFRA 2.0 Condition Assessment – Scrub Habitat Type

| Condition Assessment Feature | Assessment |
|--|--|
| 1. There are at least three woody species, with no one species comprising more than 75% of the cover (except common juniper, sea buckthorn or box, which can be 100% cover). | Yes – mixed planting with no single species accounting for more than 75% will be ensured. Species established will include at least three of the following species, hawthorn, blackthorn, elder, dog-rose, bramble, hazel. |
| 2. There is a good age range – a mixture of seedlings, saplings, young shrubs and mature shrubs. | Yes – management will ensure that the scrub is managed with the selective coppicing and subsequent regeneration creating a diverse age range with seeding and sapling regeneration. |
| 3. Pernicious weeds and invasive species make up less than 5% of the ground cover. | Yes – management will ensure. |
| 4. The shrub has a well-developed edge with un-grazed tall herbs. | Yes – the scrub will have a well- developed edge and is surrounded by species rich meadow grassland or tussock forming grassland and/or is fenced off to the general public. |

| Condition Assessment Feature | Assessment |
|--|---|
| 5. There are many clearings and glades within the scrub. | Yes – the large extent of these habitats will create the opportunity for clearings and glades to be established and management will ensure that these remain. Habitat within the clearings should be established through Emorsgate EM2 Standard General Purpose Meadow Mixture and/or Emorsgate EM10Tussock Mixture seeding. |

Species Rich Meadow Grassland - (Other neutral grassland)

Wildflower grassland creation co-buffering retained hedgerows with mixed scrub is to be sown with a seed mix such as Emorsgate EM2 Standard General Purpose Meadow Mixture. Habitats are targeted to reach 'moderate' condition in 10 years.

DEFRA 2.0 Condition Assessment – Grassland Habitat Types

| Cor | dition Assessment Feature | Assessment |
|-----|--|--|
| 1. | The area is clearly and easily recognisable as a good example of this type of habitat and there is little difference between what is described in the relevant habitats classifications and what is visible on site. | Yes – will be easily recognisable as a grassland habitat. |
| 2. | The appearance and composition of the vegetation on site should very closely match the characteristics for the specific Priority Habitat [i.e. as described by either the Phase 1 habitat Classification of the UK Habitat Classification], with species typical of the habitats representing a significant majority of the vegetation. | No – unlikely to reach NERC S41 habitat. |
| 3. | Wildflowers, sedges and indicator species for the specific Priority grassland habitat are very clearly and easily visible throughout the sward and occur at high densities in high frequency. | Yes – establishment and management will ensure wildflowers, sedges and other indicator species are present and easily visible through a specific mowing regime promoting flower and seed establishment. |
| 4. | Undesirable species and physical damage is below 5% cover | Yes – management will ensure weeds and invasive species remain >5% of the ground cover. |
| 5. | Cover of bare ground less than 10% (including localised areas, for example, rabbit warrens). | Yes – management will ensure |
| 6. | Cover of bracken is less than 20% and cover of scrub and bramble habitats is less than 5%. | Yes – management will ensure. |

Mixed Scrub (Heathland and Shrub - Mixed Scrub) - Moderate condition

Mixed scrub is to be established co-buffering retained hedgerows along with species rich meadow grassland. Unlike the other areas of mixed scrub establishment, due to the smaller extents of this scrub establishment, it is only likely to achieve 'moderate' condition and will take 3 years.

DEFRA 2.0 Condition Assessment – Scrub Habitat Type

| Condition Assessment Feature | Assessment |
|--|--|
| 1. There are at least three woody species, with no one species comprising more than 75% of the cover (except common juniper, sea buckthorn or box, which can be 100% cover). | Yes – mixed planting with no single species accounting for more than 75% will be ensured. Species established will include at least three of the following species, hawthorn, blackthorn, elder, dog-rose, bramble, hazel. |
| 2. There is a good age range – a mixture of seedlings, saplings, young shrubs and mature shrubs. | Yes – management will ensure that the scrub is managed with the selective coppicing and subsequent regeneration creating a diverse age range with seeding and sapling regeneration. |
| 3. Pernicious weeds and invasive species make up less than 5% of the ground cover. | Yes – management will ensure. |
| 4. The shrub has a well-developed edge with un-grazed tall herbs. | Yes – the scrub will have a well- developed edge. |
| 5. There are many clearings and glades within the scrub. | No – due to the limited extent of these areas, clearing and glades unlikely to establish. |

Hedgerows

New hedgerows are proposed within the soft landscaping scheme and will connect into habitat providing species cover to increase their connectivity.

These sections will comprise native species and total c.630m. The hedgerows are expected to reach a 'poor' condition. This will deliver 1.63 hedgerow units.

Results and Conclusion

Habitats

With the above proposed habitat retention, creation and enhancements, the proposed development results in a **net gain of 4.05** habitat units, equating to a **net gain of 8.18%**.

This provides the quantifiable net gain required by the NPPF (Feb, 2019).

The proposed development will achieve a net hedgerow gain of 0.09 hedgerow units, equating to a net gain of 0.53%.

Appendix A – DEFRA Biodiversity Metric 2.0 Calculations

| | rn to 5 menu | |
|---|-------------------------------|--------------|
| | Habitat units | 49.50 |
| On-site baseline | Hedgerow units | 16.98 |
| | River units | 0.00 |
| | | |
| On-site post-intervention | Habitat units | 53.55 |
| | Hedgerow units | 17.07 |
| (Including habitat retention, creation, enhancement & succession) | River units | 0.00 |
| | | |
| | Habitat units | 0.00 |
| Off-site baseline | Hedgerow units | 0.00 |
| | River units | 0.00 |
| | | |
| Off-site post-intervention | Habitat units | 0.00 |
| | Hedgerow units | 0.00 |
| (Including habitat retention, creation, enhancement & succession) | River units | 0.00 |
| | | 4.05 |
| Total net unit change | Habitat units | 4.05 |
| (including all on-site & off-site habitat retention/creation) | Hedgerow units River units | 0.09 0.00 |
| (including an on site a on site habitat retention) creation) | | 0.00 |
| | Habitat units | 8.18% |
| Total net % change | Hedgerow units | 0.53% |
| (including all on-site & off-site habitat creation + retained habitats) | River units | 0.00% |



| -1 S | iite Habitat Baseli | ine | | | | | | | | | | | | | | | | | | |
|-------------|--|---|--------------------|-----------------|-----------------------|----------------------------|---|--|------------------------|------|------|--------------------|-------------------------------|-----------------|---------------------------------|-----------|------------|--------------------------------------|---------------------------------|-------------------|
| | Condense / Show Columns Condense / Show Rows | | | | | | | | | | | | | | | | | | | |
| Г | Main Menu Instructions Habitats and areas Habitat Habitats and areas Habitat Ecological Ecological Retention category biodiversity value | | | | | | | | | | | | | | | Bespoke | | | | |
| | | Habitats and areas | | distinctiveness | | connectivity | Strategic significance | Suggested action to address | baseline | | | F | Retention ca | tegory biodiver | rsity value | | | compensation | Comm | ents |
| ef | Broad Habitat | Habitat type | Area (hectares) | Distinctiveness | Condition | Ecological connectivity | Strategic significance | habitat losses | Total habitat units | Area | | Area succession | Baseline units retained | units | Baseline units succession | Area lost | Units lost | agreed for unacceptable losses | Assessor comments | Reviewer comments |
| | Cropland | Cropland - Cereal crops | 22.91 | Low | N/A - Agricultural | N/A | Area/compensation not in local strategy/ no local strategy | Same distinctiveness or better habitat required | 45.82 | | | | 0.00 | 0.00 | 0.00 | 22.91 | 45.82 | | | |
| | Urban | Urban - Developed land; sealed surface | 0.21 | V.Low | N/A - Other | N/A | Area/compensation not in local strategy/ no local strategy | Compensation Not Required | 0.00 | | | | 0.00 | 0.00 | 0.00 | 0.21 | 0.00 | | hardstanding | |
| | Lakes | Lakes - Ponds (Priority Habitat) | 0.07 | High | Moderate | Low | Area/compensation not in local strategy/ no local strategy | Same habitat required | 0.84 | 0.07 | | | 0.84 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| | Urban | Urban - Orchard | 0.06 | Medium | Poor | Low | Area/compensation not in local strategy/ no local strategy | Same broad habitat or a higher distinctiveness habitat required | 0.24 | | | | 0.00 | 0.00 | 0.00 | 0.06 | 0.24 | | | |
| | Urban | Urban - Vegetated garden | 0.04 | Low | Poor | Low | Area/compensation not in local strategy/ no local strategy | Same distinctiveness or better habitat required | 0.08 | | | | 0.00 | 0.00 | 0.00 | 0.04 | 0.08 | | | |
| | Urban | Urban - Developed land; sealed surface | 0.01 | V.Low | N/A - Other | Low | Area/compensation not in local strategy/ no local strategy | Compensation Not Required | 0.00 | | | | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | | buildings | |
| | Woodland and forest | Woodland and forest - Other woodland; broadleaved | 0.15 | Medium | Poor | Low | Area/compensation not in local strategy/ no local strategy | Same broad habitat or a higher distinctiveness habitat required | 0.60 | 0.15 | | | 0.60 | 0.00 | 0.00 | 0.00 | 0.00 | | scattered trees | |
| | Heathland and shrub | Heathland and shrub - Mixed scrub | 0.04 | Medium | Poor | Low | Area/compensation not in local strategy/ no local strategy | Same broad habitat or a higher distinctiveness habitat required | 0.16 | 0.04 | | | 0.16 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| | Grassland | Grassland - Modified grassland | 0.04 | Low | Poor | Low | Area/compensation not in local strategy/ no local strategy | Same distinctiveness or better habitat required | 0.08 | | | | 0.00 | 0.00 | 0.00 | 0.04 | 0.08 | | improved grassland | |
| | Woodland and forest | Woodland and forest - Other woodland; broadleaved | 0.42 | Medium | Poor | Low | Area/compensation not in local strategy/ no local strategy | Same broad habitat or a higher distinctiveness habitat required | 1.68 | | 0.42 | | 0.00 | 1.68 | 0.00 | 0.00 | 0.00 | | broadleaved plantation woodland | |
| L | | | | | | | | | | | | | | | | | | | | |
| | | Total site area ha | 23.95 | | | | | Total Site baseline | 49.50 | 0.26 | 0.42 | 0.00 | 1.60 | 1.68 | 0.00 | 23.27 | 46.22 | | | |

| | Condense / Show | | | | | | | | | |
|--|---|---------------|------------------|-------------------------------|---|-----------------------------------|---------------------------------------|----------------------------|----------------------|-------------------|
| Main Menu | Instruction | | | | | | | | | |
| | | Post developm | ent/ post interv | ention habitats Ecological | Temporal multiplier | Difficulty | | | nments | |
| Proposed habitat | abitat Area (hectares) Distinctiveness | | Condition | Ecological connectivity | Strategic significance Strategic significance | Time to target condition/years | Difficulty of creation category | Habitat units delivered | Assessor comments | Reviewer comments |
| Urban - Sustainable urban drainage feature | 0.56 | Low | Moderate | Low | Area/compensation not in local strategy/ no local strategy | 3 | Medium | 1.35 | | |
| Urban - Amenity grassland | 2.21 | Low | Poor | Low | Area/compensation not in local strategy/ no local strategy | 1 | Low | 4.27 | | |
| Urban - Vegetated garden | 5.78 Lo | | Poor | Low | Area/compensation not in local strategy/ no local strategy | 1 | Low | 11.16 | gardens | |
| Urban - Developed land; sealed surface | 5.33 | V.Low | N/A - Other | Low | Area/compensation not in local strategy/ no local strategy | 0 | Low | 0.00 | dwellings | |
| Urban - Developed land; sealed surface | 4.24 | V.Low | N/A - Other | N/A | Area/compensation not in local strategy/ no local strategy | 0 | Low | 0.00 | roads/pathways/leaps | |
| Grassland - Other neutral grassland | 3.78 | Medium | Moderate | Low | Area/compensation not in local strategy/ no local strategy | 10 | Low | 21.18 | | |
| Heathland and shrub - Mixed scrub | 0.53 | Medium | Moderate | Low | Area/compensation not in local strategy/ no local strategy | 3 | Low | 3.81 | | |
| Heathland and shrub - Mixed scrub | 0.84 | Medium | Good | Low | Area/compensation not in local strategy/ no local strategy | 7 | Low | 7.86 | 100% newt area | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | 1 | | | | | | | | | |

| - | Site Habitat Enhancement Condense / Show Columns Condense / Show Rows Main Menu Instructions |) | | | | | | | | | | | | |
|------|--|---|--------------------------|-------------------------------|--------------------|-----------------|-----------|-------------------------------------|---|--------------------------------|--|----------------------------|-------------------|-------------------|
| | Baseline habitats | Change in dist | nctiveness and condition | Post development/ post interv | ention habita | its . | | Ecological connectivity | Strategic significance | Temporal multiplier | Difficulty multipliers | | Cor | nments |
| Base | | Proposed habitat (Pre-populated but can be overridden) | Distinctiveness change | Condition change | Area (hectares) | Distinctiveness | Condition | Ecological connectivity score | Strategic significance | Time to target condition/years | Difficulty of enhancement category | Habitat units delivered | Assessor comments | Reviewer comments |
| 1 | Woodland and forest - Other woodland; broadleaved | Woodland and forest - Other woodland; broadleaved | Medium - Medium | Poor - Moderate | 0.42 | Medium | Moderate | Low | Area/compensation not in local strategy/ no local strategy | 15 | Medium | 2.34 | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | Total site area | 0.42 | | | | | | Enhancement total | 2.34 | | |
| | | | | | | | | | | | | | | |

| B-1 | Site | Hedge | Baseline |
|-----|------|-------|----------|

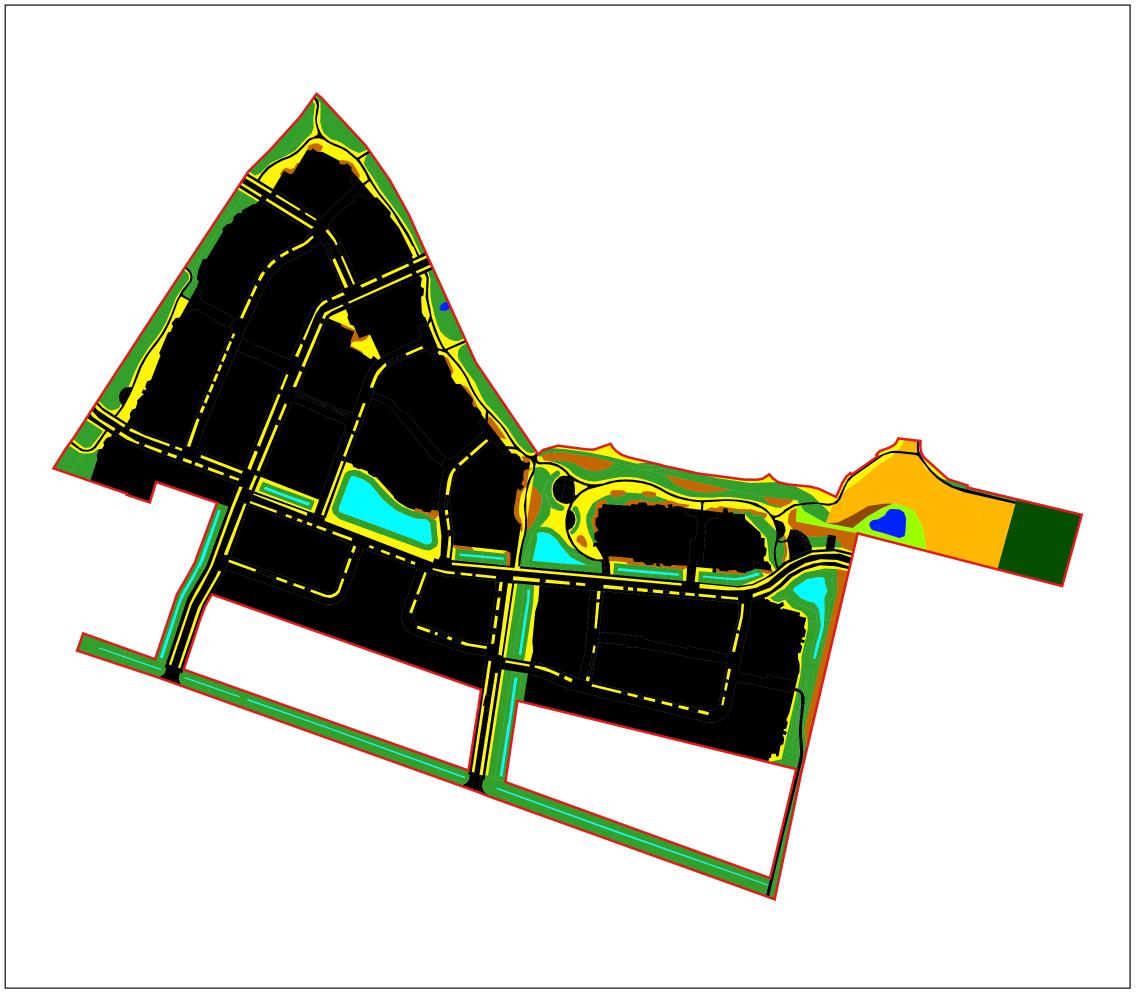
Condense / Show Columns Condense / Show Rows
Main Menu Instructions

| _ | | | | | | | | | | | | | | | | | |
|---------|--------------|---|--------------|----------------------------|----------------------|----------------------------|---|---|----------------------------|--------------------|--------------------|-------------------|-------------------|----------------|------------|-------------------|-------|
| | | UK Habitats - existing habitats | | Habitat distinctiveness | Habitat condition | Ecological connectivity | Strategic significance | | Ecological baseline | | Retention | category bio | odiversity va | lue | | Comr | ments |
| ref | Hedge number | Hedgerow type | length KM | Distinctiveness | Condition | Ecological connectivity | Strategic significance | Suggested action to address habitat losses | Total hedgerow units | Length retained | Length enhanced | Units retained | Units enhanced | Length lost | Units lost | Assessor comments | |
| 1 | 1 | Native Hedgerow - Associated with bank or ditch | 0.38 | Medium | Moderate | Low | Area/compensation not in local strategy/ no local strategy | Like for like or better | 3.04 | 0.36 | | 2.88 | 0 | 0.02 | 0.16 | | |
| 2 | 2 | Native Species Rich Hedgerow with trees | 0.4 | Medium | Poor | Low | Area/compensation not in local strategy/ no local strategy | Like for like or better | 1.6 | 0.33 | | 1.32 | 0 | 0.07 | 0.28 | | |
| 3 | 3 | Native Species Rich Hedgerow with trees - Associated with bank or ditch | 0.4 | High | Moderate | Low | Area/compensation not in local strategy/ no local strategy | Like for like | 4.8 | 0.35 | | 4.2 | 0 | 0.05 | 0.6 | | |
| 4 | 4 | Native Hedgerow - Associated with bank or ditch | 0.65 | Medium | Moderate | Low | Area/compensation not in local strategy/ no local strategy | Like for like or better | 5.2 | 0.59 | | 4.72 | 0 | 0.06 | 0.48 | | |
| 5 | 5 | Native Hedgerow | 0.2 | Low | Poor | Low | Area/compensation not in local strategy/ no local strategy | Same distinctiveness band or better | 0.4 | 0.19 | | 0.38 | 0 | 0.01 | 0.02 | | |
| 6 | 6 | Native Hedgerow - Associated with bank or ditch | 0.29 | Medium | Poor | Low | Area/compensation not in local strategy/ no local strategy | Like for like or better | 1.16 | 0.29 | | 1.16 | 0 | 0 | 0 | | |
| 7 | 7 | Native Species Rich Hedgerow with trees - Associated with bank or ditch | 0.13 | High | Poor | Low | Area/compensation not in local strategy/ no local strategy | Like for like | 0.78 | 0.13 | | 0.78 | 0 | 0 | 0 | | |
| 8 | | | _ | | | | | | | | | | | | | | |
| 9 10 | | | | | | | | | | | | | | <u> </u> | | / | |
| 10 | | | - | | | | | | | | | | | | | | |
| 12 | | | 1 | | | 1 | | | | | | | | | | | |
| | | Total Site length/KM | 2.45 | | • | • | • | Total Site baseline | 16.98 | 2.24 | 0.00 | 15.44 | 0.00 | 0.21 | 1.54 | | |
| | | | | | | | | | | | | | | | | | |

| Reviewer comments | |
|-------------------|--|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

| 6 | | | ge Creation | | | | | | | | | | |
|-----------------|-----|-----------------------|---|--|----------------------------|----------------------|----------------------------|---|--------------------------------|-------------|-------------------|--------------|--|
| | Con | ndense / | / Show Columns Condense / Show Rows |) | | | | | | | | | |
| | | Mai | in Menu Instructions | | | | | Multipliers | | | | | |
| _ | - | _ | | | | | | Spatial quality | | | | | |
| _ | | | Proposed habitats | | Habitat distinctiveness | Habitat condition | Ecological connectivity | Strategic significance | Temporal multiplier | Hedge units | Comments | | |
| Baseline ref | e h | New hedge umber | Habitat type | Length km Distinctiveness Condition | | Condition | Ecological connectivity | Strategic significance | Time to target condition/years | delivered | Assessor comments | Reviewer com | |
| 1 | | | Native Species Rich Hedgerow with trees | 0.63 | Medium | Poor | Low | Area/compensation not in local strategy/ no local strategy | 1 | 1.63 | | | |
| 2 | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | |
| | | | Creation Length/KM | 0.63 | | | | | | 1.63 | | | |

| viewer comments | |
|-----------------|--|
| | |
| | |
| | |



FPCR Environment and Design Ltd, Lockington Hall, Lockington, Derby, DE74 2RH = t:01509 672 772 = f:01509 674 565 = e: mail@fpcr.co.uk = w: www.fpcr.co.uk masterplanning environmental assessment landscape design urban design ecology architecture arboriculture

This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without written consent of FPCR Environment and Design Ltd.

Ordnance Survey material - Crown Copyright. All rights reserved. Licence Number: 100019980





scale @ A3 1:3500

drawing / figure number Figure 1

Countryside Properties Ltd. Himley Village, Bicester HABITAT ENHANCEMENT PLAN



issue 26/5/2021