LAND AT CHERRY GARDENS
LITTLESTONE
KENT:
ECOLOGICAL IMPACT ASSESSMENT

BY

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INTRODUCTION

1.0.1 Martin Newcombe was commissioned by Jim Smith to carry out an ecological impact assessment of Land at Cherry Gardens, Littlestone, Kent[1].

1.0.2 This impact assessment has been broadly prepared according to the Chartered Institute of Ecology and Environmental Management Guidelines (2022) and discusses the likely effects of the proposed development on the ecology of the site using information collected during the preliminary ecological assessment and over several years' acquaintance with the site and its surroundings.

1.0.3 This report assesses the potential ecological impacts resulting from the proposed development within the red line boundary of the application site. Following the preliminary ecological assessment[2] it was determined that no further surveys were required, although advice and information about other local wildlife was gained by contact with local residents and experts.

1.0.4 If no development of the site takes place within twelve months of the date of this report, then the findings of the assessment should be reviewed. An update of the surveys and/or the assessment may then be required.

1.1 Ecological Background

1.1.1 The initial Phase 1 Habitat survey was carried out in August 2022[3].

1.2 Report Aims

1.2.1 The aims of this report are:

- To establish the baseline ecological conditions existing on site at the time of survey and to identify any likely future changes in the baseline conditions up to the point of the commencement of development.
- To determine likely significant effects resulting from the proposals upon the ecological features identified within the assessment.
- To assess whether the proposals are likely to be in accordance with relevant nature conservation legislation and planning policies.
- To identify where further surveys to establish baseline conditions, inform assessment or develop mitigation are required.
- To identify how mitigation or compensation measures will be secured, maintained and monitored.
- To identify ecological enhancements to be carried out and how they will be implemented, maintained and monitored.

[1] Hereafter referred to as 'the survey site'.
[2] Newcombe, 2022.
[3] Ibid.

1.3 Site description and summary

1.3.1 The application site is simple and is located to the northwest of the northern end of the existing Cherry Garden road. This is within the village of Littlestone and consists of a single pasture field which is regularly cut by machine. The field is bordered by a hedgerow on the north side, with the rest of the boundaries being garden fences of varying types.

1.3.2 The site is surrounded by l pasture to the north, by a golf course to the north – west, and by residential development on the other side. The site is situated on the edge of extensive development which neighbours open countryside dominated by pasture and golf courses. There is a small area of recent woodland in the southeastern corner which consists of standard trees with minimal understorey.

1.3.3 The application site is approximately 0.61 hectares (ha) in size, and the approximate centre of the site is at OS. TR080251. Of the 0.61 hectares, 0.032 hectares is the woodland area. There is a deciduous hedge along the northern boundary.

1.4 Development Proposals

1.4.1 The proposals comprise an application for the erection of nine dwellings with the creation of a new vehicular access from Cherry Garden.

1.4.2 The proposals will result in the loss of 0.61 hectares of improved grassland to allow the proposed residential development. Some marginal hedgerows will be established or improved but otherwise there will be no ecological gain.

1.4.3 This report has been broadly prepared in accordance with the appropriate recommendations[4]. It has been prepared by an experienced ecologist who has been practicing for forty years.

1.5 Assessment Scope / Consultation

1.5.1 The impact assessment will consider impacts arising during the construction and occupation phases of the scheme as far as can reasonably be anticipated.

1.5.2 The zone of influence of the development was considered to extend beyond the application site due to potential effects such as increased artificial light and increased human / domestic pet presence within the surrounding area. Unfortunately, lack of entry permissions prevented access to a wider area than the application site.

1.5.3 Due to the potential for effects on Dungeness, Romney Marsh and Rye Bay Site of Special Scientific Interest and Ramsar site, and the nearby Special Area of Conservation[5] and Special Protection Area[6] ,the development requires a Habitat Regulations Assessment to be prepared.

[4] British Standard: BS42020: 2013; CIEEM, 2022.
[5] Hereafter 'SAC'.
[6] Hereafter 'SPA'.

2.0 BASELINE CONDITIONS

2.1 Introduction

2.1.1 The ecological features of the site are shown in the ecological scoping survey[7] .

2.2 Methods of evaluation.

2.2.1 Each recorded species, habitat or designated site is described in this section in order to provide the pre-development baseline conditions on site. Subsequently, an evaluation of each feature's 'ecological importance' is made.

2.2.2 Each feature is classified on a geographically – based scale of ascending importance as either negligible, site, local, district, county, national or International. This level is given based on the likely status of any impact. If there is insufficient survey information to determine the importance of a species or habitat present on the site, the importance of this is categorised as 'uncertain' based upon the judgement of the author of this report.

2.2.3 Once importance has been determined any items of local importance or above will be considered further, whereas lower categories will not be considered any further, except where legally protected.

2.3 Desk Study Methods

2.3.1 Statutory designated sites for nature conservation were identified using the 'KLIS' website[8] .

2.3.2 The Kent and Medway Biological Records Centre[9] was consulted for records of protected species within 1 kilometre of the site.

2.3.3 Martin Newcombe's own database of ecological records derived from past survey work was also consulted for further data.

2.3.4 Local sources of data were also consulted.

2.3.5 None of these data sources constitute a complete record of habitats and species present within the survey area.

2.4 Desk Study Findings

Designated Sites

2.4.1 Five statutory designated sites for nature conservation was identified within the desk study:

- The golf course on the northern boundary is part of the Dungeness, Romney Marsh and Rye Bay Site of Special Scientific Interest and a Ramsar site. It is also part of the National Habitat network as coastal sand dunes. .
- The nearest part of the Dungeness, Romney Marsh and Rye Bay Special Area of Conservation and Special Protection Area [10] is located approximately 560 metres to the east.

2.4.2 There are no local or non-statutory designated sites for nature conservation within 1 kilometre of the survey area.

2.4.3 The following habitats and species, relating to the site were also identified :

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[7] Newcombe, 2022.
[8] https://webapps.kent.gov.uk/KCC.KLIS.Web.Sites.Public/ViewMap.aspx
[9] Hereafter 'KMBRC'.
[10] Hereafter 'SPA'.

- The hedgerow on the northern border.
- The southern sycamore[11] standard – dominated deciduous woodland.
- A mixture of neutral grassland and improved grassland on the adjoining golf course.
- Three records of great crested newt between 1998 and 2001 from Romney Warren Golf Club, approximately 174 metres to the north of the survey site.
- One record of great crested newt dated 2018, at approximately 724 metres to the south of the survey site.
- One record of hedgehog dated 2007, from approximately 500 metres to the southwest.
- One record of common lizard 968 metres south of the survey area in 2017, is the nearest record.
- The nearest record of grass snake was approximately 770 metres north of the survey site in 2013.

[11] Acer pseudoplatanus.

3.0 PLANNING POLICY

3.1 The following policy has been identified within Folkestone and Hythe District Council's Local Plan Core Strategy" (2020), which is considered relevant to the site.:

Policy C011: Nature conservation[12]

The District Planning Authority will not give permission for development if it is likely to endanger plant or animal life (or its habitat) protected under law and/or identified as a UK Biodiversity Action Plan priority species or cause the loss of, or damage to, habitats and landscape features of importance for nature conservation, unless;

i. there is a need for development which outweighs these nature conservation considerations and

ii. measures will be taken to minimise impacts and fully compensate for remaining adverse effects

[12] https://www.folkestone-hythe.gov.uk/downloads/file/3345/policies-applicable-2013-onwards

4.0 HABITAT SURVEY

4.1 Because the site habitats are simple, no specific habitat survey was carried out[13]

4.1.1 ***Improved Grassland***

Desk Study Information

4.1.2 Newcombe inhouse records indicate improved pasture is a common habitat in the local area.

Field Survey Results

4.1.3 One field of improved pasture was present within the survey area, and contained a species-poor, grass - improved sward with a very low proportion of flowering herbs. The field had been regularly mechanically cut for several years.

4.1.4 The sward was dominated by perennial rye grass[14] with creeping bent[15] and cocksfoot grass[16]. A low diversity of broadleaved herb species included creeping buttercup[17], broad-leaved dock[18], dandelion[19], spear thistle[20], common nettle[21] and unidentified clover.[22]

Evaluation

4.1.5 The improved grassland was considered only to be of site importance.

4.2 Hedgerow

Desk Study Information

4.2.1 Newcombe inhouse records showed that the northern field boundary was known to have comprised a single hedgerows which is largely composed of hawthorn[23] with a few specimens of blackthorn[24] and the occasional elderberry[25]. The hedgerow was not considered Important under the criteria set out in the Hedgerow Regulations 1997 as it was species poor and was obviously of fairly recent origin.

Evaluation

4.2.2 Overall the hedgerow was considered to be of local importance.

4.3 Woodland

Desk Study Information

4.3.1 Newcombe inhouse records showed no records of plant species associated with the woodland habitat.

Field Survey Results

[13] Botanical names follow Stace (2019).
[14] Lolium perenne.
[15] Agrostis stolonifera.
[16] Dactylis glomerata.
[17] Ranunculus repens.
[18] Rumex obtusifolius.
[19] Taraxacum officinale agg.
[20] Cirsium vulgare.
[21] Urtica dioica.
[22] Trifolium sp.
[23] Crataegus monogyna.
[24] Prunus spinosa.
[25] Sambucus nigra.

4.3.2. The woodland was a continuation of a sycamore woodland which extended outside the site to the northeast. The woodland had negligible ground flora or shrubs, but there was local bramble[26] and stinging nettle[27]. It did, however, contain a badger[28] sett.

Evaluation

4.3.3 Overall the woodland on site is considered to be of negligible **intrinsic** importance.

[26] Rubus fruticosus.
[27] Urtica dioica.
[28] Meles meles.

5.0 PROTECTED SPECIES SURVEY AND SPECIES OF CONSERVATION CONCERN

5.1 *Badgers*

Methods

5.1.1 A search was made for badger setts, and any sett entrances found were checked for signs of use by badgers or other mammals. Setts were classified using the Harris *et al* (1989) criteria.

5.1.2 Field signs such as digging, pathways, and two latrines were found, mainly in the small wood.

Desk Study Information

5.1.3 The sett was an outlying part of a much larger main sett which extended to the east. This sett had been known to the Martin Newcombe database and to the East Kent Badger Group since approximately 1970.

Evaluation

5.1.4 Badgers on site are considered to be of local level importance.

5.2 Bats

5.2.1 The sycamore trees within the woodland are likely to be used by bats for roosting or foraging.

Evaluation

5.2.2 The trees have low importance for bats, but are being retained so there is no impact from the proposed development.

5.3 Dormouse[29]

5.3.1 The site is outside the range for this species in Kent and as such is of negligible importance.

Water Vole[30]

5.4 This species no longer occurs in this part of Romney Marsh.

5.4 Great Crested Newts[31]

Methods

5.5.1 All waterbodies within 250 metres of the site were identified using KLIS. None of these could be directly assessed using Oldham *et al* (2020), due to access restrictions.

5.5.2 Terrestrial habitats were also assessed for their suitability for foraging and sheltering great crested newts. This species requires habitats such as rough grassland, scrub, woodland, hedgerows, mammal burrows, rubble and logs.

Limitations

5.5.3 Two ponds are located within 250 metres of the application site on private land and were not assessed for their suitability to support breeding populations of great crested newt.

Desk Study Information

5.5.4 Defra's MAGIC map facility was checked for any records of great crested newts in the local area from licence returns and other information. No ponds were identified as supporting a population of great crested newt within 1 kilometre of the survey site.

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[29] Muscardinus avellanarius.
[30] Arvicola amphibious.
[31] Triturus cristatus.

Field Survey Results

5.5.5 Due to lack of accesso permissions, no field survey could be carried out.

Evaluation

5.5.6 Overall it is considered that great crested newts may occasionally be present on site. As a result reasonable avoidance measures were suggested as being suitable for the site in the ecological report[32]. Great crested newts are nevertheless considered to be unlikely to be present in large numbers and are and therefore of negligible importance.

5.6 Reptiles

Methods

5.6.1 The habitat features that were present on the site were assessed for their potential to provide suitable habitats for use by reptile species. These include improved grassland, disturbed land, compost heaps and similar habitats.

Limitations

5.6.2 It was considered that there was no suitable habitat in the survey site, although there was a small amount of habitat in surrounding gardens. However, this latter was not considered to be significant, especially in the light of regular mowing of the survey site.

Desk Study Information

5.6.3 Grass snake[33] and common lizard[34] have been recorded, with the nearest KMBRC record being approximately 770 metres from the site.

Evaluation

5.6.4 The site is considered to be of negligible value to reptiles.

5.7 Birds

Methods

5.7.1 All parts of the survey area were surveyed for signs of use by nesting birds and any birds seen or heard during the ecological survey were noted. The site's potential to support bird species of particular conservation concern[35] (i.e. and Red List species) was also assessed. No specific breeding bird survey was carried out on site. No breeding bird survey was able to be carried out in the adjacent area due to access restrictions. Despite this the following species were recorded breeding on site:

- Green Woodpecker[36]. Bred in the wood.
- Long eared owl[37]. Has bred in the wood in 2022 and 2023[38].
- Woodpigeon[39]. Two nests in the wood. Has bred there in previous years.
- Wren[40]. Nest observed in the northern hedge.

[32] Newcombe 2022.
[33] Natrix natrix.
[34] Zootoca vivipara.
[35] i.e. Schedule 1, NERC S41.
[36] Picus viridis.
[37] Asio otus.
[38] C. Fowler *in litt.*
[39] Columba palumbus.
[40] Troglodytes troglodytes.

Other bird species that do not come under the classifications above, but are locally significant, are also given particular attention.

5.7.2 No specially protected birds, or birds of conservation concern were recorded in the survey site.

However, Long – eared owl is listed in the Kent Red Data Book[41]but is not otherwise especially listed. Romney Marsh is one of its strongholds in Kent[42].

Evaluation

5.7.3 The assemblage of bird species is good for such a small and ecologically – dull site. The presence of long – eared owl makes the site of local value.

5.8 Invertebrates

Methods

5.8.1 Any notable invertebrates identified during the ecological survey were recorded. The habitat was also assessed for its suitability for all invertebrates, and for habitats such as grass tussocks, dead wood and bare ground which may be favoured by invertebrates.

Field Survey Results

5.8.2 No surveys were carried out at the site. Due to the mown grassland it is considered that the site would not support a good assemblage of invertebrates, and similarly the sycamore – dominated woodland and the exposed hedgerow were also considered to be unlikely to hold uncommon or notable invertebrates.

Evaluation

5.8.3 Overall the invertebrates on site are only considered to be of site importance.

5.9 Summary of Ecological Importance

6.1 Summary of Development Proposals

6.1.1 The proposals comprise a planning application for nine dwellings with access road.

6.1.2 The proposals will result in the loss of 0.61 hectares of improved grassland to facilitate the proposed residential development.

6.1.3 The proposals will retain approximately 0.041 hectares of woodland and the northern hedge. A one-metre-wide badger corridor is proposed along the eastern boundary to ensure that access corridors are maintained through the site; this and other mitigation are discussed in Appendix 3.

6.1.4 The details of how the habitats within the site will be protected during the construction phase, in order to avoid unlawful acts in relation to wildlife legislation are shown in Appendices 2 and 3. A more formal plan may be required as a condition of a planning permission.

6.2 Designated Sites

Potential Impacts

6.2.1 The Dungeness, Romney Marsh and Rye Bay Site of Special Scientific Interest and Ramsar site begins just outside the northeastern tip of the proposed development site and is designated for its coastal geomorphology, and wide range of habitats such as shingle beach, saline lagoons and natural freshwater pits. As well as flooded gravel pits, lowland ditch systems, SPA

[41] Clements et al, 2015.
[42] Ibid.

birds and damp grassland and ,grazing marsh flora and fauna. The site also has diverse range of broadscale marine habitats. The nearest part of the SPA is 527 metres to the east of the proposed development site.

6.2.2 The proposed development has negligible potential to affect the SPA other than by further footfall within the site. It also has the potential to provide negligible impacts on the SSSI and Ramsar sites, provided that it is properly shielded by fencing and shrubs / hedges and that drainage is directed away from the sites; there will be no other impact upon the sites nor fragmentation of habitats.

Mitigation, Enhancement and Monitoring

6.2.3 There being no impact there is no requirement nor opportunity for any mitigation, enhancement and monitoring.

6.3 Habitats

6.3.1 To ensure the site complies with the National Planning Polkiucy Framework[43] a biodiversity net gain calculation has been undertaken using the DEFRA small sites metric 4.0 to give a relative measure of the biodiversity value of the Site before and after development. The baseline value of the site was 3.08 habitat units including 0.504 hedgerow units. Overall the development will result in net gain of 2.67 habitat units and 0.504 hedgerow units resulting in a total net change of 3.15 habitat units and 0.05 hedgerow units. The headline report of the calculation is given in Appendix 4.

6.3.2 *Hedgerows*

6.3.3 The hedgerow was largely found to be species-poor, and not considered Important under the Hedgerow Regulations 1997.

6.3.4 Hedgerows have high intrinsic conservation value and are likely to provide valuable navigational and foraging features for bats and support a range of nesting and foraging bird species.

Potential Impacts

6.3.5 The existing hedgerow is to be retained and protected as part of the proposals and no part requires removal.

6.3.6 A five metre Heras - fenced buffer is proposed to protect the hedgerow from adverse effects during construction. This will be replaced with a more substantial fence at the start of the occupation phase. This latter will also assist in the minimising of the impacts of any artificial lighting.

6.3.7 During the occupation phase of the site there is the potential for impacts to the hedgerows through lighting, pollution and lack of sensitive management leading to a loss of hedgerow quality by householders. The permanent fencing will help to prevent this loss of hedgerow in the long term.

6.3.8 To protect the retained hedgerows during the construction process fencing will be placed to act as tree protection fencing. This will be installed at 5 metres in order to provide an ecology buffer, from the outer edge of the retained hedgerow. This will be constructed to the British standard[44].The areas within the tree protection fencing will be off limits to construction vehicles and will not be used to store materials.

6.3.9 Additional hedgerow planting is proposed along the inside of the hedgerow to create a double parallel hedgerow which will clearly define the green corridors and help protect the existing hedgerow from increased artificial light spill.

6.3.10 The hedgerow within the application site will remain unmanaged to ensure that they remain bushy and provide foraging and nesting opportunities for a range of species.

6.3.11 Approximately 200 metres of new native hedgerow / scrub will be created in the rear gardens of plots 1 and 2 to enhance that part of the site and to act as the badger corridor. .

[43] NPPF. Ministry of Housing, Communities and Local Government. 2021.
[44] BS 5837:2012

Residual Effects

6.3.12 The enhancement of the hedgerow will ensure there are no significant residual impacts to the hedgerow present on site and that a likely significant additional benefit to wildlife associated with hedgerows will result from the development.

6.4 Protected Species and Species of Conservation Concern

6.4.1 ***Badger***

6.4.2 Part of a main badger sett was noted within the woodland in the southeastern corner of the site.

Potential Impacts

6.4.3 The sett is within approximately 28 metres of the nearest proposed dwelling.

6.4.4 The developed part of the survey area is likely to represent a small proportion of the resident badger's foraging area; evidence suggests that the animals forage in nearby residential areas and on the nearby golf course. The existing sett will be retained and protected but the development proposals will reduce the overall area that is suitable for foraging badgers within the site.

Mitigation, Compensation, Enhancement and Monitoring

6.4.5 In view of the presence of an established sett within the development area, it is strongly recommended that a survey of the development area for newly excavated setts is carried out no more than two months prior to the commencement of construction. This will ensure that no illegal damage to setts or disturbance to badgers occurs during the beginning of construction.

6.4.6 The fragmentation of suitable badger commuting routes will be minimised through the creation of a dedicated one metre – wide badger corridor behind plots 3 to 6, and the installation of a 400 centimetre Polypipe which will extend from the woodland where the sett is located to the side of the edge of the proposed access road between plots 6 and 7. A speed bump will be inserted into the access road close to this point to ensure that traffic speed is minimal, in order to avoid collisions with badgers using the road and the tunnel. In addition the badger sett will be permanently fenced with a two-metre fence to ensure that the sett area is not appropriated by future householders. A yearly check of the area will be undertaken, and measures taken to ensure that any encroachment is corrected.

6.4.7 The landscaping proposals for the site include extensive placement of badger – proof fencing around all rear gardens to prevent damage to the rear gardens of the properties.

6.4.8 Mitigation proposals during construction are shown in Figure 3.

6.4.9 Measures such as covering excavations or providing badgers a means of escape during construction will also be provided.

Residual Effects

6.4.10 Presuming the mitigation and enhancement measures described above are put in place the proposals will not result in any significant adverse effects on badgers at the site.

6.5 ***Great Crested Newt***

Potential Impacts

6.5.1 No ponds or water bodies were present within the survey area, but a review of maps , identified that two ponds exist to the north of the survey area, approximately 200 metres from the development site. The ponds were identified using KLIS, but no visual assessment was undertaken due to a lack of access. The ponds may in fact be unsuitable for breeding.

6.5.2 Studies by Jehle & Arntzen (2000) identified that great crested newts will mostly stay close to breeding ponds. The great crested newt guidelines[45] note that migration over 250 metres only occurs in exceptional circumstances.

6.5.3 Although the use of the two ponds by great crested newts cannot be completely ruled out, due to the distance between the ponds and the development area it is considered highly unlikely that newts would be affected by the development proposals.

6.5.4 In the unlikely event that a great crested newt is found at any time whilst work is taking place then work must stop immediately and a suitably – qualified ecologist must be called. This person would assess the need for a European Protected Species licence to proceed and / or whether Natural England needs to be informed.

Mitigation, Compensation, Enhancement and Monitoring

6.5.5 It is highly unlikely that great crested newts would be present within the proposed construction area[46]. The preparation of a statement of reasonable avoidance measures for great crested newts will be prepared prior to the commencement of development.

6.5.6 The proposed hedgerow planting will slightly increase the suitability of the site for great crested newts and other amphibians.

Residual Effects

6.5.7 The proposals will not result in any significant adverse effects on great crested newts and may result in minor enhancement for this species by means of the creation / retention of hedgerows.

6.6 ***Birds***

6.6.1 The bird assemblage that was recorded on site was small but typical of such grass – dominated habitat.

Potential Impacts

6.6.2 The hedgerow network within the application site will be retained and will thereby reduce any adverse impacts. There may be slightly increased disturbance as a result of the presence of humans and domestic pets.

Mitigation, Compensation, Enhancement and Monitoring

6.6.3 The small wood will; be retained, protected by its own permanent fence. Checks will be made on a yearly basis to ensure that none of the households has encroached upon the area.

Residual Effects

6.6.4 Providing the above measures are implemented the proposals will not result in any significant adverse effects on birds.

[45] English Nature 2001.

[46] The ponds were examined for newts in c. 2019 for a pipeline scheme and no newts were found. (Anon, *verb. comm*.)

7.0 CONCLUSIONS

7.1 The proposed development has the potential to result in no **adverse impacts** upon any ecological features other than badgers, for which avoidance and mitigation measures have been proposed to ensure that any adverse impacts have been reduced. This mostly includes the protection of the woodland and of the northern hedgerow.

7.2 Despite the absence of permission to visit the SSSI / Ramsar site, and the limitations on survey that that were thereby imposed, there appear to be no significant impacts on the SSSI / Ramsar site.

7.3 Assuming the successful implementation of the measures described above the proposed development can be considered not to transgress Folkestone and Hythe District Council's Local Plan Core Strategy" (2020) planning policy C011.

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APPENDIX 1: IMPACT ASSESSMENT FOR DESIGNATED SITES.

- The site lies adjacent to the Dungeness, Romney Marsh and Rye Bay Site of Special Scientific Interest (SSSI) and to the Wetland of International Importance under the Ramsar Convention (Ramsar Site). It is also within 530 metres of the Dungeness, Romney Marsh and Rye Bay Special Protection Area (SPA) and Dungeness Special Area of Conservation (SAC). The SSSI designation in particular, was imposed for The following impacts therefore need to be considered:

- Noise Impacts.

- The proposed development will be residential in nature. As a result, provided that it is visually screened from the SSSI, the impact of noise will be no more than already exists in adjoining residential development.

- Lighting impacts.

- Existing residential development in the area was largely built without any consideration of lighting impacts. However, since the proposed development is immediately adjacent to the SSSI, it is recommended that the impact of lighting on the SSSI is minimised as follows:
- Any permanent lighting, including street lighting, that is erected on site should be either low - pressure sodium lamps or mercury lamps fitted with ultraviolet filters. Such light should be hooded to ensure that the minimum possible rea is illuminated, and no street lighting should affect anywhere except the proposed development.
- The brightness of all lighting and lamps should be kept as low as possible and be directed to where it is needed to avoid unnecessary spillage of light into the SSSI.
- Column heights should be carefully considered to minimise light spill and glare visibility. This lighting should not be upwardly - directed and lighting duration should be limited by fitting timers to all external lights on dwellings.
- LED luminaires should be used where possible.
- Where appropriate, external security lighting should be set on motion sensors and set to as short a possible timer as possible. For most general residential purposes, a 1- or 2-minute timer is likely to be suitable.

- Recreation impacts.

    - Within the site
- Provided that the site is adequately shielded from the SSSI by fencing and hedging, there will be no recreational impacts from within the site.
    - Outside the site
- The presence of nine new households will increase the pressure on the SSSI site where there is public access., although this is very limited. This particularly applies to the shoreline where the presence of extra people will increase trampling, the presence of numbers of dogs will increase nitrophilous enrichment of the flora and disturbance of feeding shorebirds. There may also be slightly increased disturbance on the adjacent golf course, depending on whether or not the golf course has restricted membership.

- Pollution via surface water run-off / drainage.

- Pollution may arise from the new dwellings and / or from motor vehicles using the proposed access road.
- In both cases, street and domestic drainage will be channelled into the proposed development's drainage system and therefore to the local sewage works. This assumes that domestic wastewater will be adequately planned for, and that roof drainage will also be directed into local sewers. Motor vehicle pollution from oil and similar wastes will be dealt with by ensuring that all domestic parking places and garages will possess pervious finishes and gullies that also direct waste oils and solvents to the sewage system.

- Impacts on any functionally linked land to the Special Protection Area within/bordering the site.

- Within the list of operations requiring natural England's consent in SSSIs, none of these apply directly, since the land is not part of the SSSI. However, it is closely adjacent to the SSSI. Provided that drainage and lighting are dealt with as above, and provided that hedging is adequate, there will be no direct impact on any adjacent land within or outside the SSSI.

APPENDIX 2: HEDGEROW AND WOODLAND PROTECTION

- The woodland will be protected by the permanent badger fence which will be erected prior to the commencement of construction .
- The northern hedgerow will be protected by a Heras fence placed 5 metres from it as shown in Figure 3.

APPENDIX 3: BADGER MITIGATION.

- Site clearance

- Prior to the commencement of any development, a Heras fence shall be erected to protect the woodland area containing the badger sett. The position of this fence is shown in Figure 1.

- Construction

- The following shall be implemented during construction:

- Erect and / or maintain a Heras fence barrier between the works and the sett, preferably at the edge of the site. This boundary must not be crossed by any members of the work force at any time without prior authority from the site engineer or foreman.
- Refrain from entering any such protected area for any purpose, nor interfere with any badger sett, or block any entrance to a badger sett, whether protected or not.
- Refrain from using any area close to a badger sett (whether protected or not) as an improvised toilet for any purpose and under any circumstances whatsoever.
- Refrain from using any area close to a badger sett (whether protected or not) for the storage of any materials required or used on site.
- Refrain from obstructing any known badger path for any reason.
- Do not refuel, repair or maintain (where the repairs involve engine, fuel, hydraulic or lubrication systems) any vehicle or machinery within 30 metres. of a badger sett if the sett is still active.
- Do not idle any machinery within 30 metres of a sett except for normal pauses in the course of authorised work.
- Do not dump or otherwise leave any oil - based waste on the ground anywhere within 30 metres of a badger sett.
- Do not spill any oil - based liquids in such a way that they might be caused to enter a sett or to be deposited within 10 metres of any sett entrance.
- Do not dig within 20 metres of the sett, whether by hand or machine, except as directed by the foreman or site engineer and / or a person holding a licence under the 1992 Protection of Badgers Act.
- Do not deposit or cause to be deposited, any surplus soil or any other materials within any protected area or near any sett, nor on any known badger path.
- Ensure that any open trenches which are to be left open on or near to any badger sett or badger path are either covered over and made badger - proof overnight or are provided with a plank exit enabling trapped animals to escape. Any water - filled trenches or other excavations must be securely badger - proofed.
- Immediately notify the site ecologist in the event of any of the above conditions being breached, so that immediate remedial action may be taken.
- Notify the site engineer, foreman or badger worker in the event of discovering any new badger setts, paths, other signs, or areas of badger activity.

- Operation

- In order to enable the badgers and residents to coexist, the following is proposed:

- A one-metre-wide badger corridor will be left at the rear of plots 3,4,5 and 6. This is to enable the badgers to continue to reach their existing feeding grounds.
- Where the existing boundary does not possess any hedging, hedging shall be planted on the outer side of the badger corridor to provide additional seclusion to animals suing the corridor.
- A length of 400 mm. Polypipe will be installed beneath the fence line between plots and 7. The pipe will extend from one metre inside the fence protecting the badger sett to a point where shrubbery is indicated at the road boundary of plots 6 and 7.
- Underground badger – proof fencing will be installed one metre from the existing property edge on the boundary with the badger sett, along the eastern edge, along the northern edge and on the southwestern edges of plots 1 and 9 as shown in Figure 2. The purpose of this is to prevent badgers from damaging the

rear gardens of the proposed dwellings. The same fencing will also be installed between each plot to ensure complete freedom from badger interference with the rear gardens of the proposed dwellings.

- Two - metres high close – board or similar fencing will be installed on the same route at the rear of plots 3,4,5,6 and 7. The purpose of this is to ensure, as far as possible, that the badger path is not used as a dumping ground for household and garden rubbish.
- A rubber road bump to be installed in the access road on a line with the fence between plots 8 and 9.
- Residents must be supplied with an information pack telling them about the badgers, when they move into the properties.
- The sett shall be inspected every year for the first five years after construction, and any encroachments rectified immediately.

APPENDIX 4: BIODIVERSITY NET GAIN CALCULATIONS .

As can be seen from the headline results appended below the biodiversity net gain calculations clearly shows that the onsite habitat mitigation will not provide a significant enhancement to biodiversity locally. This is probably due to the small size of the site.

Site Name	Land at Cherry Gardens, Littlestone
Sheet Name	Headline Results

Headline Results

Headline	BNG Targets Met ✓
Trading Rules	Trading Rules Satisfied ✓
Next steps	Submit metric to LPA

Baseline Units	*Habitat units*	2.5880
	Hedgerow units	0.5040
	River units	Zero Units Baseline
Post-development Units	*Habitat units*	2.6696
	Hedgerow units	0.5042
	River units	0.0000
Total net unit change	*Habitat units*	0.0816
	Hedgerow units	0.0002
	River units	0.0000
Total net % change	*Habitat units*	3.15% ▲
	Hedgerow units	0.05% ▲
	River units	% target not appropriate

Habitats units required to meet target	-0.0816
Hedgerow units required to meet target	-0.0002
River units required to meet target	0.0000

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FIGURE 1 : BADGER PROTECTION DURING CONSTRUCTION.

THE RED LINE SHOWS THE TWO METRES - HIGH FENCE PERMANENTLY PROTECTING THE BADGER SETT.

Figure 2; BADGER PROTECTION DURING OPERATION.

THE BLACK DOTTED LINE SHOWS THE LOCATION OF BADGER FENCING TO STOP BADGERS ENTERING GARDENS. THE BROWN BROKEN LINE ACROSS THE ACCESS ROAD IS THE LOCATION OF A SPEED BUMP. THE RED LIEN SHOWS THE EXTENT OF THE ONE METRES – WIDE CORRIDOR TO ENABLE BADGERS TO REACH EXISTING FORAGING AREAS. THE BROWN BROKEN LINE SHOWS THE LOCATION OF THE 400 MMM POLYPIPE WHICH WILL ENABLE BADGERS TO REACH AREAS TO THE NORTH; THE END OF THE TUNNEL WILL BE PLANTED WITH SHRUBS TO HIDE IT.

FIGURE 3: POSITION OF PERMANENT FENCES FOR THE NORTHERN HEDGEROW AND THE BADGER SETT.

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