11. Ecology and Biodiversity

Introduction

11.1. This chapter has been prepared by Waterman Infrastructure & Environment (WIE) and presents an assessment of the likely ecological effects of the Development. CVs for the competent experts responsible for preparing this chapter are provided in **Appendix 1.2**, **ES Volume 2**.

11.2. This chapter provides a description of the methods used in establishing the baseline and the impact assessment. This is followed by a description of the relevant baseline conditions of the Application Site and surrounding area, together with an assessment of the likely significant effects of the Development during operation. Mitigation measures are identified where appropriate to avoid, reduce or compensate any adverse effects identified and/or enhance likely beneficial effects. Taking account of the mitigation measures, the nature and significance of the likely residual effects are described.

11.1. This chapter is supported by the following figures:

- **Figure 11.1**: Habitat Baseline Plan.

11.2. This chapter is accompanied by the following appendices, provided in **ES Volume 2**:

- **Appendix 11.1:** Legislation;
- **Appendix 11.2**: Habitat Suitability Index (HSI) Scores; and
- **Appendix 11.3:** Habitats Regulations Assessment Screening.

Legislation, Planning Policy and Guidance

11.3. The following comprises a summary of the key legislation, policy and guidance of relevance to this assessment. Further information is provided in **Appendix 11.1**.

Legislation

11.4. The chapter takes into account the following relevant legislation:

- The Environmental Act 2021[1];
- The Conservation of Habitats and Species Regulations 2017 (as amended)[2];
- The Wildlife and Countryside Act (WCA) 1981 (as amended)[3];
- The Countryside and Rights of Way (CRoW) Act 2000[4];
- The Natural Environment and Rural Communities (NERC) Act 2006[5];
- The Hedgerow Regulations 1997[6]; and
- The Protection of Badgers Act 1992[7]

Planning Policy and Guidance

11.5. This chapter takes into account the following national and local planning policy and guidance:

- National Planning Policy Framework 2024, Section 15, Paragraphs 187 to 195[8].

- National Planning Practice Guidance, Natural Environment Chapter[9], which explains key issues in implementing policy to protect biodiversity, including local requirements; and
- Ashford Local Plan 2030, policy ENV1[10].

Other Policy and Guidance

11.6. This chapter also takes into account the following additional ecological policy, standards and guidelines:

- UK Biodiversity Framework (UKBF) 2024[11];
- Kent Biodiversity Strategy[12];
- Biodiversity 2020: A strategy for England's wildlife and ecosystem services;
- BS42020: 2013 Biodiversity: Code of Practice for Planning and Development

Assessment Methodology and Significance Criteria

Assessment Methodology

Establishing Baseline Conditions

11.7. In 2020, Mott MacDonald was appointed by the Department for Transport (DfT) to undertake a biodiversity assessment[13] for the proposed use of an area of land at Sevington, near Ashford in Kent. This assessment was in support of a Special Development Order (SDO) for a temporary Inland Border Facility (IBF). At the time of the assessment the SDO Application Site consisted of an area of approximately 66 ha (ha), principally comprising arable farmland with small fields of semi-improved neutral grassland, areas of tall ruderal vegetation, and mixed boundary features such as hedgerows.

11.8. In November 2024, Waterman Infrastructure & Environment (WIE) was commissioned to undertake an updated ecological survey at the Sevington IBF, to inform a new planning application for the continued use and operation of the Sevington IBF. The Application Site, which covers an area of approximately 48 ha (**Figure 3.2**), is currently in operation on a temporary basis after permission was granted via the SDO in December 2020.

11.9. An updated Habitat Regulations Assessment (HRA) screening has been undertaken to support the full application for the continued use and operations at the IBF. Details are provided in **Appendix 11.2**.

Ecological Desk Study and Data Search

11.10. An updated ecological data search was undertaken in November 2024 to collate any records for statutory and non-statutory designated sites as well as protected and other notable species of fauna and flora within a minimum of 2km of the Application Site. These records were requested from Kent and Medway Biological Records Centre (KMBRC). Records of International statutory sites designated for their nature conservation value within 10km of the Application Site were also searched for on the Multi-Agency Geographic Information for the Countryside (MAGIC).

11.11. A summary of the ecological data search results has been included where relevant to the impact assessment.

Field Survey

11.12. An 'Extended' UK Habitat Assessment (UKHab)[14] Survey of the Application Site was undertaken on 14th November 2024. The UKHab Survey methodology was 'Extended' by undertaking an assessment of the Application Site to support protected and notable faunal species.

11.13. UKHab supersedes previous systems such as Phase 1[15], allowing for direct interpretation of baseline habitat survey data into Priority Habitat Types and Annex I Habitat[16] types.

11.14. A fine scale Minimum Mapping Unit (MMU) was deemed an appropriate level for mapping habitats i.e., a habitat area was only mapped if the habitat was greater than 25m^2 or 5m in length.

11.15. Each habitat was assigned a Primary Code of the Professional Edition of the UKHab Field Key[17] at a minimum of the Level 3 hierarchy, using the UKHab Habitat Definitions[18] for reference. Secondary Codes (SC) were then applied to provide additional context to the habitats, with no more than six Secondary Codes being assigned.

11.16. All habitat types within the Application Site were mapped (**Figure 11.1**) with target notes where appropriate.

11.17. Where access allowed, adjacent habitats were also considered to assess the Application Site within the wider landscape, and to provide information with which to assess likelihood of impacts of the Development extending beyond the planning application boundary.

Evolution of the Baseline

11.18. In accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended)[19] (EIA Regulations), the ES includes consideration of the likely evolution of baseline in the absence of the Development (i.e. should the application for the continued use and operation not be successful). This is to determine the likely effect if the Cumulative Schemes and any relevant policy designations were to come forward in the absence of the Development.

Assessment Methodology

11.19. This assessment was undertaken with reference to the Chartered Institute of Ecology and Environmental Management ('CIEEM') guidelines for ecological impact assessments (the 'Guidelines')[20]. Although the Guidelines are recognised as current industry guidance, they are also recognised as not being a prescriptive tool for carrying out ecological impact assessments; they provide guidance to practitioners for refining their own methodologies.

Zone of Influence

11.20. The Zone of Influence (ZoI) is the spatial extent over which Important Ecological Features (IEFs) are likely to be affected by biophysical changes caused by the Development. The ZoI was determined through a review of baseline conditions, consideration of the wider local environment, consideration of the type of development and the likely impacts arising during the operational phase of the Development.

11.21. The conceivable ZoI of the Development is assessed to be;

- 10km for statutory designated sites of International importance for nature conservation given Natural England guidance[21] and 2km for all other National statutory designated sites of importance for nature conservation;
- 2km for non-statutory designated sites; and
- The Application Site and immediate adjacent areas up to 2km for habitats and legally protected and notable species.

11.22. Given the semi-rural location of the Application Site and that it would be subject to regular disturbance events and physical barriers (for example to legally protected and notable species migration) the ZoI is unlikely to extend any further than the distances detailed above.

Assessment of Ecological Features

11.23. The ecological features are evaluated based on criteria (including Ratcliffe's criteria[22]) in the Guidelines. This is based on an understanding of how the potentially affected population or habitat contributes to the conservation status or distribution of the species or habitat at a particular geographical scale.

11.24. Determination of value of ecological features within the survey area is assessed according to the geographical framework given below;

1. **International** - very high importance and rarity, international and European scale and very limited potential for substitution;
2. **National** (England)- high importance and rarity, national scale, and limited potential for substitution;
3. **Regional** (South-east England) - high or medium importance and rarity, regional scale, limited potential for substitution;
4. **County** (i.e., Kent) - medium importance and rarity, county scale, potential for substitution.
5. **Local** (i.e., Application Site and neighbouring receptors) - low or medium importance and rarity, local scale;
6. **Site** (i.e., the Application Site) - very low importance and rarity, local scale; and
7. **Negligible.**

11.25. Baseline data has been used to identify relevant ecological features (including designated sites, habitats and species) of value (or potential value).

11.26. Based on baseline data collection, ecological features (habitats, species, ecosystems and their functions / processes) that are 'important' without taking into account their risk of being significantly affected by the Development are identified initially. Then the potential for these features to be significantly affected by the Development is completed as part of the impact assessment. These features are termed Important Ecological Features (IEFs).

11.27. To identify IEFs for the purposes of this assessment, professional judgement and experience was used, informed by previous data collected for the SDO application, and the results of the baseline data collection for the Application Site, derived from desk studies, consultation and the field survey. Consideration was given to habitats and species for nature conservation, such as

designated sites, Biodiversity Action Plan lists and legally protected species. When an ecological feature is not listed/designated, consideration was given to population, diversity and key functional role and connectivity within the wider environment. Species that are not considered 'important' or are unlikely to be significantly affected include (but are not limited to) species that are sufficiently widespread, unthreatened and/or resilient, and habitats or species insufficient in size or diversity.

11.28. Details of the ecological features that are not considered 'important' or unlikely to be significantly affected by the operational phase of the Development have not been assessed within this chapter. In accordance with the Guidelines these are assessed to be features valued at below a **Local** level, in accordance with the geographical scales provided above. However, in accordance with the scoping opinion for this full application for the IBF to continue to operate, those features previously subject to a planning condition/obligation or that were subject to mitigation and/or enhancement measures would be taken forward as IEFs.

Operational Development

11.29. This assessment considers the following impacts associated with the continued use and operation of the IBF at the Application Site and within the ZoI:

- Severance of key wildlife dispersal corridors and habitat connectivity as a result of displacement caused by ongoing noise, visual and lighting impacts.
- Disruption of ecological networks due to changes in environmental condition through ongoing operational pollutants i.e. vehicle emissions.

Methodology for Defining Effects

11.30. Under the Guidelines impacts on biodiversity are assessed not only by magnitude but are also characterised and described as beneficial/adverse, together with their extent, duration, timing and frequency. **Table 11.1** provides impact criteria used in line with the Guidelines.

Table 11.1: Criteria for determining the impact on ecological features under the Guidelines

Characteristic	Criteria
Beneficial or Adverse	• Beneficial impact: a change that improves the quality of the environment. Beneficial impacts may also include halting or slowing an existing decline in the quality of the environment. • Adverse impact: a change that reduces the quality of the environment.
Extent	• The spatial or geographic area over which the impact/effect may occur.
Magnitude	• Refers to the size, amount, intensity and volume. It will be quantified if possible and expressed in absolute or relative terms.
Duration	• Duration will be defined in relation to ecological characteristics (such as a species' lifecycle), as well as human timeframes. The duration of an activity may differ from the duration of the resulting effect caused by the activity. Effects may be described as short, medium or long-term and permanent or temporary. Short, medium, long-term and temporary will need to be defined in months/years.
Frequency	• The number of times an activity that will impact biodiversity will occur.

Characteristic	Criteria
Timing	• The timing of an activity or change caused by the project may result in an impact if this coincides with critical life-stages or seasons.

11.31. Effects can also be defined as being direct or indirect. A direct effect is defined as an effect resulting in the direct interaction of an activity with an environmental or ecological component. An indirect effect is defined as an impact on the environment which is not a direct result of a project or activity, often produced away from, or as a result of, a complex effect pathway.

Significance Criteria

11.32. CIEEM defines a significant impact as 'an impact (negative or positive) on the integrity of a defined site or ecosystem and/or the conservation status of habitats and species within a given geographical area' (CIEEM, 2024). Therefore, an impact can be significant at the Application Site, Local, Parish, Regional, National or International level i.e., at the level the IEF has been valued at or lower.

11.33. Integrity is defined as 'the coherence of the ecological structure and function, across the whole area (of a site), that enables it to sustain the habitat, complex of habitats and/or population of species for which it was classified.' (European Commission Managing Natura 2000).

Assumptions, Exclusions and Limitations

11.34. The following assumptions and limitations are relevant to the ecology and biodiversity assessment:

- The Application Site survey was conducted outside of the optimal season for botanical surveys (April-September) when the majority of plant species are visible, but all plants and habitats were identified through their floristic (where possible) and vegetative characteristics. Historic species lists provided in reports such as the Landscape and Ecological Management Plan (LEMP)[23] by Mott Macdonald were also used where appropriate in areas of proposed landscape planting for the temporary IBF.
- For security reasons, photography was not permitted within the Application Site during the 2024 ecological survey, so no photographic evidence of the habitats has been provided.
- In light of the absence of up-to-date protected species information for the Application Site and missing spatial information, it has been assumed that the protected species covered in the LEMP are present on the Application Site. Due to this application covering the continued use of the IBF SDO site, there will be no significant detrimental effect to the species that we have assumed presence of.

11.35. General assumptions and limitations which apply to all technical chapters are set out in **Chapter 2: EIA Methodology**.

Consultation

11.36. Consultation regarding the methodology for the Ecology and Biodiversity assessment was undertaken via the EIA scoping consultation process. The key points raised in these consultation

responses, together with a commentary regarding how they have been addressed, are summarised in **Table 11.2.**

Table 11.2: Issues raised in the EIA Scoping Opinion – Ecology and Biodiversity

Summary of Key Issue	How has this been addressed	Where is this addressed in the ES
Confirmation of habitats and species currently on site	Updated 'Extended' UK habitats classification survey was undertaken November 2024	Field survey results section - paragraph 11.48 to 11.102
Clarification of what mitigation was carried out to implement the current works on site	Review of LEMP	Embedded Mitigation and Design Features (inherent Mitigation) section – paragraphs 11.106 and 11.107
Assessment of Great Crested Newts	Considered in result and mitigation sections	Paragraph 11.66 to 11.69

Summary of Construction-related Effects

11.37. As the IBF is already built and operational, construction impacts were scoped out of the ES. However, in response to the EIA Scoping Request, ABC requested a summary of construction effects within each relevant ES chapter. The findings of the landscape and visual assessment, set out within the March 2022 SDO may be summarised as:

"Construction may temporarily impact nearby nature conservation areas due to noise, lighting, and disturbance. Ashford Green Corridors LNR may experience minor, temporary dust and noise effects, but no significant impact is expected. No other designated sites will be affected.

Approximately 83.45ha of habitat, mainly arable land (78.45ha), will be lost, including 0.73ha of hedgerow, scrub, and scattered trees. To protect wildlife, vegetation clearance will occur outside the breeding season under ecological supervision.

Mitigation measures will prevent pollution, dust, and noise impacts on retained habitats. Night-time work (April–October) will be restricted to protect foraging bats. Licences will be obtained for badger sett closure and dormouse habitat clearance. A reptile mitigation strategy, including translocation and supervision, will be in place before construction.

Root protection areas for trees and hedgerows will be established, with protective fencing and exclusion zones to prevent damage. Restrictions on excavation, storage, and chemical use near trees will be enforced via the CMP.

No significant biodiversity effects are anticipated. Further details are in the Biodiversity Assessment (Appendix H) [of the Analysis of Likely Environmental Effects of the Development, 2022]."

Baseline Conditions

Pre-Development Baseline (Application Site)

11.38. The Application Site has previously been subject to numerous ecological surveys, undertaken between 2012 and 2015, when Middlemarch Environmental Ltd undertook baseline ecological

surveys to support the original Stour Park Environmental Statement[24]. These surveys are summarised in **Table 11.3** below:

Table 11.3: Survey Summary from 2012 - 2015

Survey	Date	Report Reference
Review of Existing Ecological Data and Extended Phase 1 Habitat Survey	2012	RT-MME-111201-01
Winter bird surveys	2012	RT-MME-111201-02
Great crested newt surveys	2012	RT-MME-111201-03
Reptile survey	2012	RT-MME-111201-04
Badger survey	2012	RT-MME-111201-05
Water vole survey	2012	RT-MME-111201-06
Initial bat survey	2012	RT-MME-111201-07
Dormouse Habitat Assessment	2012	RT-MME-111201-08
Breeding bird survey	2012	RT-MME-111201-09
Hedgerow Regulations (1997) survey	2012	RT-MME-111201-010
Bat activity surveys	2012	RT-MME-111201-011
Initial bat survey of buildings	2012	RT-MME-112274-01
Nocturnal and dawn bat surveys	2012	RT-MME-112274-02
Great crested newt surveys	2014	RT-MME-116467
Preliminary Ecological Appraisal	2015	RT-MME-120243-01
Hedgerow Regulations (1997) Assessment	2015	RT-MME-120243-02
Dormouse habitat assessment	2015	RT-MME-120243-03
Reptile survey	2015	RT-MME-120243-04
Badger survey	2015	RT-MME-120243-05

11.39. In 2020, Mott Macdonald prepared 'An Analysis of the Likely Environmental Effects of the Development' report for the SDO application for the temporary IBF. As part of this, an updated Ecological Walkover was undertaken in May 2020, to confirm whether there had been any changes in the ecological baseline and habitats within the Development since 2015. The predominant habitat type identified on-site in 2020 was arable habitat, containing wheat *Triticum Sp.*, with five hedgerows defining the field boundaries. Small areas of grassland, both improved and poor semi-improved, tall ruderal habitat, scrub, plantation woodland, and scattered trees were also present.

11.40. Following the updated ecological walkover in 2020, further surveys to assess the impact of the temporary IBF on protected and notable species were undertaken between 2020 and 2023. These surveys are summarised in **Table 11.4** below:

Table 11.4: Survey Summary from 2020 - 2023

Survey	Date	Report Reference
Sevington Inland Border Facility – Biodiversity Assessment	2020	419419-MMD-XX-MO-RP-BD-0001
Land East of Highfield Lane – Landscape and Ecological Management Plan	2020	419419-MMD-XX-SV-RP-L-0001
Land East of Highfield Lane – Landscape and Ecological Management Plan	2023	419419-MMD-XX-SV-RP-L-0004

Survey	Date	Report Reference
Sevington Inland Border Facility – Dormouse Survey Report	2023	419419-MMD-XX-SV-RP-BD-0003
Sevington Inland Border Facility – Bat Transect Monitoring Technical Note	2023	419419-MMD-XX-SV-RP-BD-0005
Sevington Inland Border Facility – Breeding Bird Monitoring Report	2023	419419-MMD-XX-SV-SU-BD-0001
Sevington Inland Border Facility – Reptile Monitoring Report	2023	419419-MMD-XX-SV-RP-BD-0004

Desk Study and Data Search

11.41. The 2024 ecological data search returned records from KMBRC of statutory and non-statutory designated sites for nature conservation and protected species records within the 2km ZoI.

Statutory Designated Sites

11.42. The Application Site is not located within any International statutory designated sites, however there are two sites located within the 10km ZoI for the Application Site, as set out in **Table 11.5** below.

Table 11.5: Summary of International Statutory Designated Sites within 10km of the Application Site

Designated Site	Distance (km) and Direction from Application Site	Description
Dungeness, Romney Marsh and Rye Bay RAMSAR	8.3 SW	Special protected area of wetland supporting breeding and wintering birds, including waterbirds and birds of prey. There are also diverse groups of bryophytes, invertebrates and other wetland species. Fields used for sheep farming for centuries. There are no direct connections between this statutory designated site and the Application Site itself.
Wye and Crundale Downs Special Area of Conservation (SAC)	4.9 NE	Biological and geological site providing a variety of habitats for wildlife, including grassland, fen, woodland on chalk and wet alder woodland. There are no direct connections between this statutory designated site and the Application Site itself.

11.43. The Application Site is not located within or adjacent to any national statutory designated sites for nature conservation, however there are two sites located within 2km of the Application Site, as set out in **Table 11.6** below.

Table 11.6: Summary of Statutory Designated Sites within 2km of the Application Site

Statutory Designated Site	Distance (km) and Direction from Site	Description
Ashford Green Corridors Local Nature Reserve (LNR)	0.1 W	A 47ha green space bordering on the A2070 which includes a lake, urban meadows, ponds and parks. Wintering birds and kingfishers found on Singleton Lake.

Statutory Designated Site	Distance (km) and Direction from Site	Description
Hatch Park Site of Special Scientific Interest (SSSI)	0.7 E	This is a deer park which consists largely of broadleaved and yew woodland.

Non-statutory Designated Sites

11.44. The Application Site is not located within or adjacent to any non-statutory designated sites for nature conservation, however three Local Wildlife Sites (LWS) are located within 2km of the Application Site, as set out in **Table 11.7** below.

Table 11.7: Summary of Statutory Designated Sites within 2km of the Application Site

Statutory Designated Site	Distance (km) and Direction from Site	Description
South Willesborough Dykes LWS	0.9 SW	An area of over 80ha consisting of ancient semi-natural woodland, a river, and livestock farmland.
Willesborough Lees and Flowergarden Wood LWS	1.1 N	Site which contains ancient semi-natural woodland, wetland and grassland, and hosts a variety of birds.
Woods near Brabourne LWS	1.7 NE	An area of ancient semi-natural woodland

Ancient Woodland

11.45. 'Ancient Woodland' is any wooded area that has been wooded continuously since at least 1600 Anno Domini (AD). Ancient woodland is the richest land-based habitat for wildlife in the UK and is defined as an irreplaceable habitat.

11.46. Ancient woodland includes:

- *'ancient semi-natural woodland'* mainly made up of trees and shrubs native to the site, usually arising from natural regeneration; and
- '*plantations on ancient woodland sites'* areas of ancient woodland where the former native tree cover has been felled and replaced by planted trees, usually of species not native to the site.

11.47. Many areas of ancient woodland do not appear on the Ancient Woodland Inventory collated by Natural England, because their low tree density did not register on historic maps and woodland areas of less than 2ha were relatively dismissed.

11.48. In total there are 15 areas of ancient semi-natural woodland within 2km of the Application Site, the closest being Bockhanger & Spring Wood, approximately 0.65km east.

Field Survey – Habitats

11.49. The following habitat types, described in more detail below, were identified within the Application Site during the 'Extended' UK Habitat Survey:

- Buildings (u1b5);
- Other Developed Land (u1b6);
- Built Linear Features (u1e);
- Modified Grassland with scattered trees, ruderal and ephemeral and sustainable drainage systems (g4 32 80 848);
- Mixed Scrub (h3h); and
- Ponds (r1g 41).

11.50. The habitat descriptions given below should be read in conjunction with the Habitat Features Plan **Figure 11.1**.

Buildings (u1b5), Other Developed Land (u1b6), and Built Linear Features (u1e)

11.51. There are 15 buildings within the Application Site, making up the offices and associated buildings / facilities of the IBF. All the office buildings within the Application Site are prefabricated with flat roofs and external metal stairs. The remaining buildings comprise corrugated metal sheds used for goods inspections.

11.52. The other developed land consisting of hardstanding (u1b6) present within the Application Site includes roads, footpaths, car parking and other sealed areas associated with the buildings.

11.53. There is a metal security fence (u1e) present around the perimeter of the IBF, and a number of wooden noise barrier fences at strategic locations throughout the Application Site, as shown in **Figure 11.1.**

Modified Grassland scattered trees, ruderal and ephemeral and sustainable drainage systems (g4 32 80 848)

11.54. Grassland is present throughout the Application Site and the surrounding areas.

11.55. G1 is an area of modified grassland, in the centre of the IBF, with new scrub planting along the borders of the grassland. The grassland is a mix of common dandelion *Taraxacum sp, r*ibwort plantain *Plantago lanceolata* broadleaf plantain *Plantago major*, bristly oxtongue *Helminthotheca echioides*, perennial rye-grass *Lolium perenne*, yorkshire fog *Holcus lanatus*, cut-leaved cranes-bill *Geranium dissectum*, common mouse-ear *Cerastium fontanum*, common ragwort *Jacobaea vulgaris*, white clover *Trifolium repens*, creeping thistle *Cirsium arvense*, oxeye daisy *Leucanthemum vulgare*, yarrow *Achillea millefolium*, curled dock *Rumex crispus*, narrow-leaved ragwort *Senecio inaequidens*, and field speedwell *Veronica persica*. The newly planted scrub contained very young saplings with tree guards, and a mixture of immature scrub species including hawthorn *Crataegus monogyna,* blackthorn *Prunus spinosa*, common buckthorn *Rhamnus cathartica,* field maple *Acer campestre,* hazel *Corylus avellana* and coral berry *Symphoricarpos orbiculatus.* This grassland parcel is of low distinctiveness and in poor condition.

11.56. The majority of the modified grassland within the IBF (G2) is regularly managed, with a short sward height and was dominated by perennial ryegrass *Lolium perenne* with creeping thistle *Cirsium arvense*, white clover *Trifolium repens*, yorkshire fog *Holcus lanatus*, common dandelion *Taraxacum sp.*, ribwort plantain *Plantago lanceolata*, black meddick *Medicago lupulina*, bristly

oxtongue *Helminthotheca echioides*, pineapple weed *Matricaria discoidea* and broadleaf plantain *Plantago major*. The grassland parcel is of low distinctiveness and poor condition.

11.57. G3 are areas of modified grassland that is dominated by ruderal and ephemeral vegetation species bordering the IBF. The sward height in these areas are more varied and contain species including chervil *Anthriscus cerefolium*, bristly oxtongue *Helminthotheca echioides*, perennial ryegrass *Lolium perenne*, cock's-foot *Dactylis glomerata*, mallow *Malva sylvestris*, common nettle *Urtica dioica*, common dandelion *Taraxacum sp.*, common ragwort *Jacobaea vulgaris*, creeping bent *Agrostis stolonifera,* teasel *Dipsacus fullonum*, cow parsley *Anthriscus sylvestris*, common ragwort *Senecio jacobaea*, yarrow *Achillea millefolium*, common nettle *Urtica dioica*, bramble *Rubus fruticosus*, white clover *Trifolium repens* and fuller's teasel *Dipsacus sylvestris.* This parcel is of low distinctiveness and in poor condition.

11.58. G4 is an area of modified grassland containing species associated with sustainable drainage systems and is located in the northeast corner of the Application Site boundary. Species include cow parsley *Anthriscus sylvestris*, narrow leaved ragwort *Senecio inaequidens*, bullrush *Typha latifolia, c*ommon ragwort *Jacobaea vulgaris*, soft rush *Juncus effusus*, small-flowered crane's-bill *Geranium pusillum*, willow *Salix sp.*, dock sp. *Rumex obtusifolius, w*illowherb sp. *Epilobium hirsutum*, hazel *Corylus avellana* and common mallow *Malva sylvestris*. This parcel is of low distinctiveness and in poor condition.

Mixed Scrub (h3h)

11.59. Areas of mixed scrub were present surrounding the IBF and are made from two distinct species compositions.

11.60. Areas of mixed scrub (MS) 1 included a single mature ash tree *Fraxinus excelsior*, bramble, hazel, blackthorn, hawthorn, cow parsley, creeping thistle, curled dock, common ragwort, spear thistle, common nettle and willowherb. This area of mixed scrub is in moderate condition.

11.61. Areas of MS 2 contained field maple *Acer campestre*, hazel *Corylus avellana*, cow parsley *Anthriscus sylvestris*, less teasel *Dipsacus fullonum*, common nettle *Urtica dioica*, blackthorn *Prunus spinosa*, hawthorn, Willow sp. *Salix* and common buckthorn. This area of mixed scrub is in moderate condition.

Ponds (r1g 41)

11.62. Seven ponds (P1-P7) are present within the Application Site. All the ponds are surrounded by modified grassland containing broad dock *Rumex obtusifolius,* bristly Oxtongue *Helminthotheca echioides,* common nettle *Urtica dioica,* cleavers *Galium aparine*, cock's-foot *Dactylis glomerata,* spear thistle *Cirsium vulgare,* forget-me-not *Myosotis sylvatica*, narrow-leaved ragwort *Senecio inaequidens* and has marginal vegetation containing bulrush *Typha latifoli,* hazel *Corylus avellana* and willow sp. *Salix*. Pond P1 is in moderate condition scoring 6 points, with ponds P2-P7 all in poor condition scoring 5 points. The results of the Habitat Suitability Index (HSI) surveys on all seven ponds can be seen in the amphibian section below.

Habitats Overview

11.63. The habitats within the Application Site will remain in situ and unchanged during the operational phase of the Development. A LEMP for the monitoring and maintenance of habitats is currently in place to mitigate and enhance the habitats on site.

11.64. In the unlikely event that the operational phase results in small amounts of polluted run-off, or accidental pollution through vehicle oil spillage in proximity to sensitive habitats such as ditches, this could potentially result in habitat degradation. However, this would be avoided or reduced to levels which are not significant by the embedded sustainable drainage systems (SuDS) design. Impacts arising during operational activities are anticipated to be **not significant** on habitats.

Field Survey – Notable and Legally Protected Species

11.65. As a result of the ecological surveys and a review of the ecological desk study, an initial assessment has determined that the Application Site has the potential to support the following species:

- Amphibians;
- Bats;
- Badger;
- Birds;
- Dormouse;
- Reptiles;
- Water Voles; and
- Invertebrates.

All other protected and notable species have been scoped out of the assessment due to the lack of suitable habitats on the Application Site and connecting pathways to suitable habitats and are therefore not detailed within this report.

Amphibians

11.66. The ecological data search returned 135 records of great crested newt (GCN) *Triturus cristatus* within 2km of the Application Site, the closest being approximately 0.4km north. Furthermore, a total of seven ponds (P1-P7) are present within the Application Site. A summary of the Habitat Suitability Index (HSI) surveys results which, conducted at all 7 of the ponds, is presented in **Table 11.8** below. Further detail is provided in **Appendix 11.2**.

Table 11.8: Habitat Suitability Index for Great Crested Newts

Pond Reference	HSI Score	HSI Result
P1	0.76	Good
P2	0.71	Good
P3	0.71	Good
P4	0.70	Good
P5	0.70	Good

Pond Reference	HSI Score	HSI Result
P6	0.73	Good
P7	0.6	Average

11.67. Five Natural England (NE) European Protected Species Licences (EPSL) are present for GCN within 2km of the Application Site, all are located approximately 1.7km south-west of the Application Site. They cover the damage/destruction of a resting place and the most recent of the licences ran from August 2017 until December 2023.

11.68. In 2012, Middlemarch Environmental Ltd conducted a Great Crested Newt (GCN) survey and found a medium population of GCNs in two garden ponds off Kingsford Street, located approximately 0.66km to the east of the Application Site, with a small portion of the SDO Development falling within a 0.5km radius of these ponds. Common amphibians, including smooth newts, palmate newts, common frogs, and common toads, were also recorded in several ponds. In 2014, an updated GCN survey within a 500m radius of the adjacent M20 Junction 10a Scheme identified 17 waterbodies, with seven ponds undergoing HSI assessments and presence/absence surveys. Two of these ponds had 'excellent' suitability, three ponds had 'good' suitability, and two ponds had 'average' suitability for GCNs. The presence/absence survey confirmed a small population of GCNs in the same pond that had been previously recorded in 2012.

11.69. With a population of GCN in both 2012 and 2014 being present within 1km of the Application Site, the closest being within 250m, and the seven ponds present within the Development, amphibians are assessed to be of **Local value** and are therefore considered an IEF for this assessment.

Bats

11.70. The ecological data search returned records of several bat species including common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, Noctule *Nyctalus noctula,* Brown long-eared *Plecotus auratus,* Serotine *Eptesicus serotinus* and Daubenton's *Myotis daubentonii*, within 2km of the Application Site. The closet record was of a brown long-eared species approximately 80m west of the Application Site.

11.71. In 2008, Parsons Brinkerhoff conducted bat surveys at the Application Site, recording two bat roosts within trees and two notable foraging areas within and near the Application Site boundary. Five bat species were identified during the surveys, with activity dominated by common pipistrelle and soprano pipistrelle. In 2010, URS Corporation Ltd (now AECOM) completed additional surveys, finding no bat roosts but recording five bat species using the Application Site for foraging and commuting, again dominated by common and soprano pipistrelle. In 2012, Middlemarch Environmental Ltd conducted more detailed bat surveys, including daytime inspections of trees and structures, nocturnal surveys, and activity transect surveys. Potential bat roost sites included the Court Farm complex, St. Mary's Church, Bridge Cottage, Highfield Cottage, and a brick-built bridge over Aylesford Stream (outside the Application Site boundary). These surveys confirmed the presence of three common pipistrelle roosts near the Application Site, the closest being 46m west within St Mary's Church. No bat roosts were identified in 2012 within the Application Site boundary.

11.72. In 2015, Middlemarch Environmental Ltd conducted bat surveys, identifying 27 trees with potential roosting features, located just north of the Application Site boundary. These trees, including

mature poplar, sycamore, and horse chestnut, were assessed during a daytime survey. The bat activity surveys in August, September, and October 2015 recorded four bat species: common pipistrelle, soprano pipistrelle, noctule, and an unidentified Myotis species with the majority of activity concentrated along the northern field boundaries and Church Road in the south-west. In 2016, further bat surveys at Court Lodge Farm, adjacent to the Application Site, identified potential roosting features in buildings and trees. Dusk emergence and dawn re-entry surveys revealed no bat emergence or re-entry at the buildings, but foraging and commuting activity by common pipistrelle, noctule, and brown long-eared bats was recorded.

11.73. As part of the SDO application in 2020, and following construction of the temporary IBF, Mott MacDonald undertook bat activity surveys, as per the biodiversity monitoring outlined with the LEMP. In total three transect surveys between June and September 2023 were undertaken, and recorded common pipistrelle, soprano pipistrelle and Noctule bat species utilising the Application Site for foraging and commuting. The activity surveys were dominated by common and soprano pipistrelles.

11.74. In 2024 an update daytime bat walkover, which included a Preliminary Roost Assessment (PRA) of buildings and structures, and a Ground Level Tree Assessment (GLTA), found that all 15 buildings present within the Application Site, and the single tree (T1) are all of negligible suitability for roosting bats.

11.75. The presence of historic bat roosts for small numbers of more common species in close proximity to the Application Site and at least three species of bats found utilising the Application Site for foraging and commuting in 2023 with no buildings or trees suitable for roosting bats in 2024, indicate that foraging and commuting bat species are of **Local value** and are therefore considered an IEF for this assessment. Roosting bats are not considered an IEF.

Badger

11.76. The ecological data search returned 26 records of badgers *Meles meles* within 2km of the Application Site.

11.77. In 2012 and 2015, a badger survey, including walkover surveys and activity monitoring, was conducted on the Application Site by Middlemarch Environmental Ltd. No badger setts were found within the Application Site boundary, but four setts were identified adjacent to the northern boundary in 2012, including a main sett, an annexe sett, and two outlier setts, with only the annexe and outlier setts considered to be in sporadic use. None of these setts were within the Application Site boundary or within 50m of it, with the nearest sett located approximately 50m north. In 2015 no setts were recorded on Site. In May 2020, an active outlier sett (one hole) was identified to the northwest of the Application Site during a walkover survey by Mott MacDonald.

11.78. The Application Site contains suitable foraging and sett-building habitat for badger in the form of grassland and scrub, however no evidence of badger was recorded in the 2024 walkover survey.

11.79. With the historic evidence of badger adjacent to the Application Site, and the substantial habitats suitable for badgers within the local area, they are assessed to be of **less than Local value** and are therefore not considered to be an IEF.

Birds

11.80. The ecological data search returned records of multiple bird species within 2km of the Application Site.

11.81. In 2008, a bird registration survey by Cambridge Ecology for Parsons Brinkerhoff recorded 38 bird species within the Application Site, 19 of which were believed to have been breeding. Seven of these species were classified under S41, including four Kent BAP species. In 2010, a breeding bird survey by URS Corporation Ltd (now AECOM) recorded 37 species, including several Red and Amber-listed species such as skylark *Alauda arvensis*, yellow wagtail *Motacilla flava*, song thrush *Turdus philomelos*, starling *Sturnus vulgaris*, and house sparrow *Passer domesticus*. In 2012, a further survey by Middlemarch Environmental Ltd recorded 46 species, with 33 confirmed, probable, or possible breeding. This survey included the presence of two Schedule 1 (WCA) species (kingfisher *Alcedo atthis* and hobby *Falco subbuteo*) and ten Red-listed species of conservation concern, including swift *Apus apus*, house sparrow, skylark, and linnet *Linaria cannabina*.

11.82. As part of the SDO application in 2020, and following construction of the IBF, Mott MacDonald undertook a breeding bird survey, as per the biodiversity monitoring outlined within the LEMP. The breeding bird survey included five visits between April and June 2023 and recorded a total of 47 bird species within the Application Site, of which four species were confirmed as breeding (dunnock *Prunella modularis*, mallard *Anas platyrhynchos*, moorhen *Gallinula chloropus* and starling), seven were probably breeding (house sparrow, linnet, reed bunting *Emberiza schoeniclus*, skylark, whitethroat *Curruca communis*, wood pigeon *Columba palumbus* and wren *Troglodytes troglodytes*) and eight were possible breeding (greenfinch *Chloris chloris*, kestrel *Falco tinnunculus*, meadow pipit *Anthus pratensis*, rook *Corvus frugilegus*, sedge warbler *Acrocephalus schoenobaenus*, song thrush, stock dove *Columba oenas* and swift).

11.83. The Application Site currently comprises predominantly hardstanding with buildings and prefabricated offices, with areas of modified grassland, tall ruderal vegetation, scrub, scattered trees, ponds and sustainable drainage basins. The breeding bird assemblage at the Application Site does not meet any of the minimum thresholds to be considered for selection as a local wildlife site (LWS) it is therefore assessed that breeding birds are of **less than Local value**, and therefore an IEF for this assessment.

Dormouse

11.84. The ecological data search returned two records of hazel dormouse *Muscardinus avellanarius* within 2km of the Application Site.

11.85. In 2010, URS Corporation Ltd (now AECOM) carried out dormouse nest tube checks between July and October, but no dormice were recorded within the Application Site. In 2012, two lengths of hedgerow, one to the north of St Mary's Church (Grid ref. TR 03697 40920) and one running along the northern side of Church Road (Grid ref. TR 03686 40406), were identified as suitable for dormice. In 2015 Middlemarch Environmental Ltd conducted a Dormouse Habitat Assessment of the Application Site and confirmed the presence of suitable dormouse habitat in the two hedgerows previously assessed in 2012 as well as an additional area of linear scrub north of Highfield Lane (Grid ref. TR 043 409). In 2019, Middlemarch Environmental Ltd undertook

dormouse surveys from April to November, and recorded evidence of dormice at the following locations:

- Six dormouse nests found in tubes and two additional dormouse nests found in bird boxes in a small block of broadleaved woodland west of the Application Site (Grid ref. TR 0353 4079).
- One dormouse nest in a tube within vegetation north of Church Road (Grid ref. TR 036 406).
- Four dormouse nests in tubes along the southern section of the hedgerow near Highfield Lane (Grid ref. TR 039 404).

11.86. As part of the SDO application in 2020, and following construction of the IBF, Mott MacDonald undertook dormouse monitoring surveys, as per the biodiversity monitoring outlined with the LEMP. Six dormouse nest boxes were installed within the Application Site and checks were undertaken twice a year for three years, between May 2021 and September 2023. During the September 2021 nest box check, one potential dormouse starter nest was found but not confirmed, however no other confirmed or suspected dormouse activity was noted in the other five surveys.

11.87. Although suitable habitat for dormice including hedgerows is present along the boundaries of the Application Site and small areas of woodland with historic presence of dormice are adjacent to the Application Site. No signs of dormouse activity were found within the nest tubes during the 2022 and 2023 monitoring surveys.

11.88. In the 2024 walkover survey, the habitats of value for dormouse present within the Application Site include small areas of mixed scrub, where some hazel, a known food source for this species and hedgerows is present. All suitable habitat for dormice is to be retained as part of the permanent operational phase of the Development.

11.89. Although small amounts of suitable habitats are present for this species, due to the information provided by the dormouse surveys in 2022 and 2023, and the 2024 walkover survey, dormouse are assessed to be of **less than Local value** and therefore not an IEF for this assessment.

Reptiles

11.90. The ecological data search returned multiple records of slow-worm *Anguis fragilis*, grass snake *Natrix helvetica* and common lizard *Zootoca vivipara* within 2km of the Application Site.

11.91. In 2015, Middlemarch Environmental Ltd conducted reptile presence/absence and population surveys, and recorded common lizard (*Zootoca vivipara*), grass snake (*Natrix helvetica*), and slow worm (*Anguis fragilis*) at the following locations:

- Grassland north of St Mary's Church (Grid ref. TR 037 409): All three species recorded as low populations;
- Grassland along the southern Application Site boundary (Grid ref. TR 038 403): common lizard recorded (including areas southeast of Bridge Cottage and the northern verge of Highfield Lane) as a low population;
- Ecological mitigation area margins (outside of the Application Site boundary at Grid ref. TR 041 412): common lizard and slow worm recorded as low populations; and

- A2070 Bad Munstereifel Way road verges (Grid ref. TR 035 408): Slow worm recorded in exceptional numbers.

11.92. Two areas were identified in 2015 as 'Key Reptile Sites': the grassland north of St Mary's Church (for supporting three species) and the A2070 road verges (for the exceptional slow worm population).

11.93. Prior to the construction of the Sevington IBF in 2020, reptiles were translocated from the Application Site and moved to a receptor site located approximately 135m north of the Application Site. During the reptile translocation, 222 common lizards, 89 slow worms and 2 grass snakes were translocated.

11.94. As part of the SDO application in 2020 and following the translocation of reptiles and construction of the IBF, Mott MacDonald undertook reptile monitoring surveys, as per the biodiversity monitoring, outlined with the LEMP. Mott MacDonald completed one presence/absence survey in 2021 and one in 2023 at the reptile's translocation receptor site. In 2021 a total of 101 reptiles were observed over the seven surveys, including 94 common lizards and 7 slow worms of various ages and sexes. In 2023 a total of 58 reptiles were observed over the seven surveys, including 51 common lizards and 7 slow worms of various ages and sexes.

11.95. The 2024 walkover survey identified areas of grassland (G3) and mixed scrub to be suitable habitat for reptiles within the Application Site with no barriers to reptile distribution.

11.96. Given an exceptional population of common lizard and slow worm were recorded as well as a low population of grass snake and suitable habitats are present within the Application Site, it is assessed that reptiles are of **Local value**, and therefore an IEF for this assessment.

Water Vole

11.97. The ecological data search returned seven records of water vole *Arvicola amphibius* within 2km of the Application Site.

11.98. The Aylesford Stream (also known as the Old Mill Stream) located approximately 125m north of the Application Site was subject to a survey for evidence of water voles in May 2012. The 2012 survey confirmed the presence of water voles with widespread evidence found along the length of the surveyed watercourse, including 10 potential burrows, grazing areas, latrine sites and footprints.

11.99. As evidence of water vole was found within the stream located approximately 125m north of the Application Site, and suitable ponds and SuDs, at the IBF, are still present within the Application Site with connectivity under the A2070 to this population, it is considered that water vole has the potential to be present and assessed to be of **Local value**, and therefore an IEF for this assessment.

Invertebrates

11.100. The ecological data search returned numerous records of notable invertebrate species listed under Section 41 of the Habitat directive, including stag beetle *Lucanus cervus* which is also protected under the WCA 1981 (as amended). Whilst the floral diversity of the habitats was

somewhat limited at the time of survey, habitats including scrub, grassland, and trees present on Site are considered suitable for a range of invertebrate species.

11.101. An invertebrate survey associated with the proposed M20 Junction 10a Scheme was undertaken by URS Corporation in August 2010. This survey concentrated on the following habitats that would have been impacted by the proposed road junction development: the grassland to the north of St Mary's Church (On-site at Grid ref. TR 037 409), vegetation either side of the Aylesford Stream (Off-site at Grid ref. TR 038 412), and vegetation adjacent to the A20 Hythe Road (Off-site at Grid ref. TR 044 411). The survey identified a total of 114 terrestrial invertebrates and 77 aquatic invertebrates. The majority of terrestrial invertebrates were recorded along the sides of the A20 and the grassland to the north of St Mary's Church. Two nationally scarce species were recorded: long winged conehead *Conocephalus discolor* and Adonis ladybird *Hippodamia variegata*. A small pond in the north-eastern corner of the field to the north of St Mary's Church (outside of the Application Site boundary) was found to support several species of water beetle including great diving beetle *Dytiscus marginalis*, however no aquatic invertebrates of high conservation value were recorded. The data search provided by KMBRC in 2012 included records of a small number of priority invertebrate Species of Principal Importance, including stag beetle *Lucanus cervus*, cinnabar *Tyria jacobaeae*, rosy rustic *Hydraecia micacea*, white admiral *Limenitis camilla*, small blue *Cupido minimus*, and small heath *Coenonympha pamphilus*.

11.102. In 2024 much of the Application Site is assessed to be highly managed, poor condition, modified grassland, with areas of mixed scrub, ruderal vegetation and ponds which may provide small areas of value to common invertebrate species.

11.103. Due to the small areas of suitable habitat present on the Application Site for protected and notable species and the poor condition and relatively small and disconnected areas of suitable habitat present for common invertebrates, they are assessed to be of **less than Local value**, and not an IEF.

Sensitive Receptors (Important Ecological Features)

11.104. A number of IEF have been identified as part of this assessment, following the baseline review, as set out in **Table 11.9** belo**w.**

Table 11.9: Sensitive Receptors for the Application Site.

Receptor	Description	IEF Value
Amphibians	Previous surveys in 2012 and 2014 confirmed the presence of GCN within 500m. Several other ponds present within 500m. Suitable aquatic and terrestrial habitat is located within the Application Site.	Local
Bats (foraging and commuting)	3 species of bats utilising habitats on-site for foraging and commuting. Indirect effects to local bat populations may occur through light spill.	Local
Badgers	No badger setts were identified within 50m of the Application Site. The Application Site could be utilised by foraging and commuting badgers but no evidence of this was seen during the 2024 survey.	N/A - Less than Local

Receptor	Description	IEF Value
Breeding Birds	Numerous bird species were identified breeding within the Application Site, With suitable nesting bird habitat present. These species are protected by the WCA 1981 (as amended) whilst nesting.	N/A - Less than Local
Dormouse	No signs of dormice on Site during monitoring surveys. Habitats on boundary of site, and LEMP final plans	N/A - Less than Local
Reptiles	Common lizards and slow worm were recorded within the Application Site. These species are protected by the WCA 1981 (as amended) to prevent killing and/or injury.	Local
Water voles	Evidence of water vole were recorded during 2012 & 2014 surveys of the stream located 125m north of the Application Site. The stream has connectivity to ponds located within the Application Site. This species is protected by the WCA 1981 (as amended) to prevent killing and/or injury. Also destroy a place used for shelter/protection or disturb them in a place used for shelter or protection.	Local
Invertebrates	The Application Site contains habitats suitable for invertebrates, but these habitats are of a size and in a geographic location that it is unlikely that a significant population of notable species is present.	N/A – Less than Local

Assessment of Likely Significant Operational Effects

11.105. The IBF has been in-place and running since 2021 and there are no anticipated changes to the current site operations or change to the current Application Site layout. This means that all vegetation currently present on the Application Site will be retained and no significant change to lighting or pollution anticipated.

Embedded Mitigation and Design Features (Inherent Mitigation)

11.106. Under the current SDO, the IBF is actively implementing the 2020 LEMP to maintain and manage the habitats within the Application Site. Following the results of the full planning application the existing management and maintenance would be extended for a duration of 5 years. The LEMP sets out the management and maintenance of habitats required for the species that utilise the Application Site. The key design features of the LEMP include;

- Designed balancing ponds and drainage swales to have a secondary biodiversity function;
- Increased connectivity around and through the Application Site with the creation of new habitats, forming wildlife corridors and thus reducing the effects of habitat fragmentation;
- Increased habitat appropriate to the local area to benefit target species such as dormice;
- Use of locally native tree, shrub and herbaceous species in the landscape mitigation; and
- Avoids the use of invasive and competitive grass species.

11.107. Other mitigation principles adopted within the Development design include:

- The commitment for the creation of new habitats to ensure net gain of locally important habitats (species rich grassland, woodland, aquatic habitat and hedgerows);

- Maintain and enhance existing wildlife commuting corridors along the boundaries of the Development through careful siting and inclusion of buffers to lessen impacts on species using adjacent habitats;
- Provision of 6 dormouse boxes as per mitigation requirements of the NE EPS dormouse licence.
- Provision for 10 new bat roosting features within the Application Site, comprising a range of woodcrete boxes targeted towards a variety of species and suitable for a range of different use types; and
- Provision of 10 bird boxes will be installed within the Application Site to provide additional nesting opportunities for species recorded.

Designated Sites

11.108. Two International designated sites are located within the 10km ZoI. Neither Dungeness, Romney Marsh and Rye Bay RAMSAR or Wye and Crundale Downs SAC are directly connected to the Application Site. Dungeness, Romney Marsh and Rye Bay RAMSAR is designated for its wetland bird species and invertebrates.

11.109. The Application Site does have some habitat suitable for these bird species but due to the size of these habitats, and the distance the Application Site is from this RAMSAR, it is unlikely the birds at Dungeness, Romney Marsh and Rye Bay utilise the habitats within the Application Site. The results from the bird surveys in 2012 and 2023 suggest this to be the case as no significant numbers of the key species found at the RAMSAR were recorded on the Application Site. Threats to Wye and Crundale Downs SAC include grazing, inter-specific flora relations and air pollution. Only the latter of the three could be associated with the Development.

11.110. The IBF was found to have no significant effect on International designated sites in 2020 as there was only a minor increase in Critical Load (CLO) (0.6%) and Critical Levels (CLE) (5%). These figures, as identified in the 2020 HRA appropriate assessment[25], are based on the Application Site operating at maximum capacity at all times. The full HRA Screening Assessment is provided in **Appendix 11.3.**

11.111. Two National designated sites, Hatch Park SSSI and Ashford Green Corridors LNR are present within 2km of the Application Site. Due to the nature of the Development (i.e. non-residential) it is not anticipated that there would be any increase in recreational pressure at these sites as a result of the continued use and operation of the IBF. Due to the distance to Hatch Park SSSI from the Development, this site would not be affected by light spill or be susceptible to disturbance from noise and vibration from associated traffic within the Application Site. Ashford Green Corridors LNR, located directly adjacent to the west of the A2070, would also be unaffected by the Development.

11.112. The continued use and operation of the IBF would not result in an increase in vehicle movements or emissions over that currently generated as a result of the temporary IBF. As such, it is anticipated that the effect of the Development on designated sites would be **not significant**.

11.113. No further mitigation is required. With the inherent mitigation and design features in place the continued operation of the IBF is considered to result in **no significant residual effects**.

Habitats

11.114. The habitats within the Application Site will remain in situ and unchanged during the operational phase of the scheme. Currently a LEMP is in place until 2025 and will be extended for a further 5 years, however, the value of the habitat areas could subsequently decrease in the long term in the absence of appropriate management and maintenance after the extension period. This extension of the LEMP would result in a beneficial impact, which is **not significant**.

11.115. The operational phase is likely to result in small amounts of polluted run-off and accidental pollution through vehicle oil spillage which if it happened in proximity to sensitive habitats such as ditches, could potentially result in habitat degradation. However, this would be avoided or reduced to levels which are not significant by the embedded SuDS design. Impacts arising during operational activities are anticipated to be **not significant** on habitats.

11.116. An extension to the LEMP implementation period would help the habitats mature more successfully and be of benefit to the local biodiversity. The operational phase is likely to result in small amounts of polluted run-off and accidental pollution from vehicle movements still, therefore the continued operation of the IBF is considered to result in residual adverse effects that are **significant at Site level only**.

Amphibians

11.117. Some habitats including ponds and SuDs within the Application Site are suitable for GCN. A population of GCN was present in 2012 and 2014 within 1km of the Application Site, the closest being within 250m. Connectivity to this population from the Application Site is present and it is considered possible that GCN could utilise the Application Site. The habitats suitable for GCN are being retained and although the management and maintenance of GCN terrestrial habitat was not considered previously within the Application Site, it is similar habitat to that for reptiles which is set out within the LEMP. Therefore, impacts arising from the operational phase are considered to be **not significant**.

Bats

11.118. Bat boxes are present within the landscaping at the Application Site, providing opportunities for roosting bats. Bats currently using habitats within the Development are habituated to the noise created from the adjacent motorway corridor of the M20 together with the corridor of the M20 Junction 10a Scheme. The existing habitats, within the Application Site, which are suitable for foraging and commuting are being retained and an existing lighting strategy has been sensitively designed to minimise light spill in these areas. Bat surveys in 2023 identified three different species of bats utilising the Application Site whilst the temporary IBF was operating. Therefore, impacts arising from the continued operation of the IBF are considered to be **not significant** for foraging, commuting or roosting bats.

11.119. The results of the bat monitoring surveys indicate that there is a reduction in bat activity as a result of the temporary IBF facility being in place, but this is expected as the habitats within the centre of the Application Site have changed and have lighting. At least 3 species of bats are still utilising the Application Site for foraging and commuting though and with the inherent mitigation and design features in place, the continued operation of the IBF is considered to result in no

significant residual adverse effects for those species currently foraging and commuting within the Application Site

Badgers

11.120. Although no badgers are present within the Application Site and they are not an IE, any badger present within the surrounding area are likely to be habituated to the noise created by the adjacent motorway corridor and the increase in background noise levels is unlikely to exceed tolerable levels. The lighting design for the scheme minimises light spill where possible and ensures retained wildlife corridors remain at current light levels.

11.121. Badgers could be killed or injured following collisions as a result of movement of traffic in the area but fencing and lighting is in place to prevent this. Overall, the impacts arising from the ongoing operational phase of the permanent facility are considered to be **not significant** for badgers.

11.122. No signs of badgers were seen during the 2024 ecological walkover survey and the nearest historic record of badgers is over 50m away from the Application Site. No further mitigation is required. With the inherent mitigation and design features in place the continued operation of the IBF is considered to result in **no significant residual adverse effects**.

Breeding Birds

11.123. The permanent IBF will retain all vegetated habitat within the Application Site. Potential impacts from lighting are minimised by the existing sensitive lighting strategy, to minimise light spill for nocturnal sensitive species. Bird boxes are included in the current landscaping within the Application Site. Management and maintenance of habitats such as hedgerows during the operational phase of the Development could directly impact on breeding birds through the disturbance and/or destruction of active nests. But, with the current LEMP in place which states that hedgerows and tree maintenance works are to be conducted outside of the nesting bird season, impacts arising from the continued operation of the IBF are considered likely to be **not significant** for breeding birds.

11.124. With the inherent mitigation and design features in place, the continued operation of the IBF is considered to result in effects which are **not significant for** breeding birds. The Application Site has numerous habitats suitable for nesting birds which will remain in situ, and it is unlikely to be utilised by a significant assemblage of species. The further mitigation including the monitoring and re-siting of failed bird boxes could have **beneficial residual effects, which is significant at the site level.**

Dormouse

11.125. Although historic evidence of dormouse has been found within the Application Site, no evidence of this species was recorded within 2022 or 2023 and there are not IEFs. Vehicle movements could potentially disturb dormice through noise; however, dormice have shown to become habituated to elevated levels of noise as demonstrated by their presence along motorways such as the M20.

11.126. Lighting has been designed to direct light away from suitable habitat to minimise light spill onto the retained vegetation, to minimise nocturnal disturbance to dormice if present. All suitable

habitat for dormice is to be retained as part of the Development and management and maintenance of habitats such as hedgerows during the operational phase of the Development has been considered within the LEMP to avoid direct impacts. Indirect impacts on dormice through the disturbance of nests during maintenance works are still possible. Therefore, impacts arising from the operational phase are considered to be **not significant** for dormouse.

11.127. The 2022 and 2023 monitoring surveys for dormice (as per the mitigation requirements of the NE EPS licence and set out in the current LEMP) returned no records of dormice currently utilising the Application Site. However, the presence of suitable habitat and the known local populations of dormice present adjacent to the Application Site, with direct connection to the habitats within the Application Site, means impacts arising from the management and maintenance of the operational phase as set out in the current LEMP could still disturb this species. Therefore, with the further mitigation in the form of re-siting of dormouse boxes in place to help the dormouse population re-establish themselves within the Application Site, it is considered there would be **no significant residual adverse effects.**

Reptiles

11.128. Reptiles within the Application Site were translocated to a receptor site to the north of the Application Site for the Temporary IBF facility to be built. The habitats within the Application Site are of benefit to reptile. These habitats are to be retained as part of the Development. Management and maintenance to suitable reptile habitats could result in the killing/injury of reptiles. But, with the current LEMP in place which states that grassland areas will be cut outside of the hibernation period and to a length of 50 – 70mm which would avoid harm to reptiles. Therefore, impacts arising from the continued operation of the IBF are considered to be **not significant** for reptiles.

11.129. As previously stated, reptiles within the Application Site were translocated to a receptor site to the north of the Application Site prior to the construction of the IBF. The further mitigation in the form of the continued management and maintenance of habitats as set out within the LEMP would help to further establish the suitable habitat for reptiles within the Application Site. Therefore, it is considered that impacts arising from the continued operation of the IBF would result in a **beneficial residual effect, which is Significant at Site level.**

Water voles

11.130. Some habitats including ponds and SuDs within the Application Site are suitable for water vole. A population of water vole was discovered in 2012 and 2014 located approximately 125m north within the Aylesford Stream. Connectivity to this population from the Application Site is present and it is considered possible that water voles could utilise the Application Site. The habitats suitable for water vole are being retained and the lighting strategy is in place to direct light away from suitable habitat to minimise light spill, but management and maintenance to suitable water vole habitats could result in the temporary disturbance of water vole. Impacts arising from the operational phase are considered to be **not significant**.

11.131. Although no water voles have been found within the Application Site, connectivity to a known population is present to the north and suitable habitat created as part of the Temporary IBF development is now present within the Application Site. Although the current LEMP does not

consider water vole, the further mitigation in the form of an updated LMMP and the continued management and maintenance of habitats as set out within the LEMP would help to further establish the suitable habitat for water voles within the Application Site and protect them from disturbance. Therefore, impacts arising from the continued operation of the IBF is considered to have a **beneficial effect, which is Significant at Site level.**

Invertebrates

11.132. Although it is not considered the Application Site is suitable for protected or notable species of invertebrates, common species will be present. All habitats which could be utilised by invertebrates will be retained but management and maintenance to suitable invertebrate habitats could result in the killing/injury of invertebrates although it is considered to be **not significant** due to only common species being present.

11.133. The diversity of habitats within the Application Site are considered suitable for common species of invertebrates only and with all of the habitats currently in place being retained as part of the continued use of the IBF facility, it is considered there would be **no significant residual adverse effects.**

Mitigation and Enhancement Measures and Likely Residual Operational Effects

Other Mitigation and Enhancement Measures

11.134. The update LMMP, which includes the LEMP, will include additional mitigation and monitoring recommendations for protected species including:

- further mitigation including monitoring of bats boxes around the Application Site and the re-deploying of failed bat boxes if there is no sign of current use in their existing locations, the continued operation of the IBF could have a **beneficial residual effect, which is significant at Site level** on roosting bats, should the bat boxes become established.
- reptile population monitoring surveys within the Application Site, in addition to the monitoring and management of the existing reptile receptor site could have a **beneficial residual effects, which is significant at the site level.**
- GCN population monitoring surveys with the Application Site at the seven ponds created, could have a **beneficial residual effects, which is significant at the site level.**
- mitigation for water vole and monitoring for signs of water vole would be included and could have a **beneficial residual effects, which is significant at the site level.**

Summary of Likely Significant Operational Effects

11.135. **Table 11.10** summarises the likely significant effects, identified mitigation measures and the likely residual operational effects identified within this chapter.

Table 11.10: Summary of Likely Significant Operational Effects

Issue	Likely Significant Effect	Mitigation Measures	Likely Residual Effect
Designated Sites	**Not significant**	N/A	**Not significant**
Amphibians	**Not significant**	Additional monitoring via LMMP / updated LEMP	**Beneficial at Site level**
Badgers	**Not significant**	Update LMMP / updated LEMP	**Not significant**
Bats (foraging and commuting bats)	**Not significant**	Update monitoring via LMMP / updated LEMP	**Not significant**
Bats (roosting bats)	**Not significant**	Additional monitoring via LMMP / updated LEMP	**Beneficial at Site level**
Breeding birds	**Not significant**	Update LMMP / updated LEMP	**Beneficial at Site level**
Dormouse	**Not significant**	Update LMMP / updated LEMP	**Not significant**
Reptiles	**Not significant**	Additional monitoring via LMMP / updated LEMP	**Beneficial at Site level**
Water vole	**Not significant**	Additional monitoring via LMMP / updated LEMP	**Beneficial at Site level**
Invertebrates	**Not significant**	Update LMMP / updated LEMP	**Not significant**

Monitoring

11.136. The following biodiversity monitoring will be required for an additional five years as well as including additional monitoring and management practices, following planning consent for the continued operation of the IBF:

- Habitat surveys – These surveys will be combined with the landscape monitoring and associated recommendations, in order to prevent the deterioration of retained habitats within the Application Site. Photographic monitoring to be carried out using fixed point photography in years 1-5.
- Bats – Monitoring will be undertaken to determine if the level of bat activity at the Application Site has been maintained during the operational phase. Monitoring will comprise bat box checks within year 1 to assess the current status of the installed bat boxes. Should the bat boxes be empty, they will be relocated to a more suitable area. The bat boxes will then be surveyed in September of years 3 & 5 for the presence of bats. The monitoring will also consist of spring, summer and autumn activity transects which will be undertaken in years 3 and 5 in accordance with Collins (2021).
- Breeding Birds – Monitoring will be undertaken to determine if the level of breeding bird activity at the Application Site has been maintained once the Development is operational. Monitoring will be undertaken in years 3 and 5 in accordance with the Common Bird Census methodology (Gilbert et al, 1998);

- Dormouse – A single check of the dormouse boxes in May of year 1 to check for the current use of the boxes by dormice. Should the boxes show no signs of dormice they will be re-installed in a more suitable location. Then monitoring as per the previous Natural England dormouse licence requirements - twice a year (May and September) in years 2 & 4.
- Reptiles – Monitoring of the translocation receptor site to be undertaken every two years up to four years after completion of the Development, carrying out surveys to assess the status of the reptile population. This would be carried out during the active season April – June / September – October following standard reptile guidelines set out in Froglife Advice Sheet 101; and
- Water vole – Monitoring would be undertaken twice per year in the months of May and August in years 2 & 4.

11.137. A summary of the proposed post-development monitoring proposals is provided in **Table 11.11**:

Table 11.11: Proposed Post-Development Monitoring Proposals

Feature	Monitoring	Timing	Year 1	Year 2	Year 3	Year 4	Year 5
Habitats	Photographic monitoring to be carried out using fixed point photography to keep record of developing habitats and results of habitat management works.	May – July (twice per year)		x	x	x	x
Bats	A bat activity survey to be carried out to determine the success of the mitigation proposals for bats. Bat boxes will be re-installed if needed and checked for presence/absence.	Assess the bat box locations in year 1 and relocate if required. One activity survey in May, July, and September. Bat box check in September (years 2 & 4)	x		x		x
Breeding birds	A breeding bird Survey (BBS) to assess the success of the mitigation measures for breeding birds.	6 BBS surveys between April – July (years 3 & 5)			x		x
Dormouse	Monitoring of the local dormouse population by carrying out nest box survey of the 6 dormouse boxes.	Check dormouse boxes X6 in Year 1 and relocate, if necessary, then Two surveys (May & September) in years 2 & 4.	x	x		x	
Reptiles	Presence/absence surveys to determine the success of the reptile translocation and the suitability of the ecological mitigation area and suitable habitat within the Application Site.	Seven visits between April – June, years 3 & 5			x		x

Feature	Monitoring	Timing	Year 1	Year 2	Year 3	Year 4	Year 5
Water vole	Surveys to determine the population size of water vole within the Application Site.	Two surveys (May & August) in years 2 & 4		x		x	

Assessment of Future Effects

Evolution of the Baseline

11.138. Should the full planning application for the permanent continued use and operation of the Sevington IBF not be granted, then the operation of the IBF would cease, and the Application Site would be reinstated. In this case, the reinstatement would not encompass the complete reinstatement of the Application Site to its former use. The reinstatement would involve the removal of all built infrastructure on the Application Site as permitted under Article 3(1) of the SDO, including all buildings, cabins, fencing (including acoustic and security fencing) and lighting. The only elements that would be retained on the Application Site would be the development hardstanding plot areas, the drainage system, including all SuDs ponds, and the landscaping, including all bunds and the habitats created within the Eastern Land offsite.

11.139. The reinstatement of the Scheme is not anticipated to result in any new or materially different effects than those anticipated during the construction of the Scheme as all temporary structures would be removed, with the hardstanding and drainage remaining in situ. However, reinstatement activities could give rise to a temporary adverse effect on biodiversity features as a result of noise, lighting and visual disturbance from the associated personnel, plant, and traffic management during the works. Measures to minimise disturbance are outlined in the Record of Environmental Actions and Commitments (REAC) which is located within Appendix C of the Analysis of the Likely Environmental Effects of the Development (ALEED) report, and ensures lighting is minimised to avoid light spill on habitats for dormice, careful siting of haul routes, material storage areas, compounds, lighting and generators away from sensitive habitats, and no night-time working during months when bats are actively foraging (April to October inclusive) to prevent lighting disturbance to foraging bats. These measures would be carried through to the Reinstatement Plan that would be adhered to and implemented by the Reinstatement Contractor. With the above in place, it is considered that there would be temporary adverse effects that are not considered to be significant.

Cumulative Effects Assessment

11.140. Cumulative effects from the demolition and construction of the 18 Cumulative Schemes alongside the continued operation of the IBF may include temporary habitat loss, resulting in temporary adverse effects to the species using them. No significant adverse cumulative effects are anticipated in the long term, operational IBF, as mitigation and compensation measures would be required for each scheme in line with legislation and planning policy. Significant cumulative effects upon designated sites are not anticipated as a result of the Development or any other cumulative scheme.

11.141. A list of Cumulative Schemes with in the ZoI of the Development is provided in **Chapter 2: EIA Methodology**. The Cumulative Schemes listed are generally for mixed-use developments which

are either residential or commercial led. The Development does not require any further construction and so no demolition or construction effects will overlap with any of the 18 Cumulative Schemes listed in **Chapter 2**.

11.142. As a result, no adverse cumulative effects are anticipated.

References

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[4] HMSO (2000) 'The Countryside and Rights of Way (CRoW) Act'

[5] ODPM (2006) 'Natural Environment and Rural Communities Act

[6] ODPM (1997) 'The Hedgerow Regulations'

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[22] Ratcliffe, D.A. (1977) A Nature Conservation Review, Cambridge University Press

[23] Mott MacDonald 2020, Sevington Inland Border Facility – Landscape and Environmental Management Plan (Ref. 419419/419419-MMD-XX-SV-RP-L-0001/PO2

[24] Waterman Infrastructure and Environment (2016) *Stour Park Sevington Environmental Statement Volume 1*

[25] Mott MacDonald 2020, Sevington Inland Border Facility – Habitat Regulations Assessment, Stage 1 Screening, Stage 2 Appropriate Assessment (Ref. 419419/419419-MMD-XX-SV-RP-BD-0001/PO3