

H. Nature conservation and biodiversity assessment tables

H.1 Nature conservation and biodiversity assessment tables

Table H.95: Habitat types within indicative site areas and their associated corridors and access areas and their potential to support protected species

Site area	Habitat type (habitats in bold are HPI from Natural England inventory) ⁷⁷	Approximate area (ha) or length (km) ⁷⁸ (site area and indicative WWTP footprint in brackets) ⁷⁹	Approximate % land cover of the proposed site area and its associated corridors and access areas.	Habitat of principal importance from Natural England inventory	Potential to support protected species	RAG rating
1a	Broadleaved woodland	18.47 ⁸⁰ (1.54 site area)	2.46	Y	Bats, badgers, barn owls and breeding birds	Amber
	Coniferous woodland	1.02 ⁸¹	0.14	N	Bats, badgers, barn owls and breeding birds	
	Mixed woodland	1.93	0.26	Potentially	Bats, badgers, barn owls and breeding birds	
	Scrub	8.85 ⁸²	1.18	N	Badgers, breeding birds and amphibians	

⁷⁷ The HPI habitat areas are not in addition to the general habitat types areas. For example, the broadleaved woodland habitat area of 7.04ha will include the 6.34ha of HPI deciduous woodland habitat.

⁷⁸ Hedgerows, parkland/scattered trees, ditches, running water are in km only

⁷⁹ Where a habitat type exists within the shortlisted site area, this is included in brackets in order to compare between an area within the shortlisted site and total area (shortlisted site and associated corridors and access areas).

⁸⁰ Deciduous woodland habitat type combines the approximate area of A1.1.1 Broadleaved Woodland - semi-natural and A1.1.2 Broadleaved Woodland – plantation habitat types together.

⁸¹ Coniferous woodland habitat type combines the approximate area of A1.2.1 Coniferous Woodland – semi natural and A1.2.2 Coniferous Woodland – plantation habitat types together.

⁸² Scrub habitat type combines the approximate area of A2.1 - Scrub - dense/continuous and A2.2 - Scrub – scattered habitat types together.

Site area	Habitat type (habitats in bold are HPI from Natural England inventory) ⁷⁷	Approximate area (ha) or length (km) ⁷⁸ (site area and indicative WWTP footprint in brackets) ⁷⁹	Approximate % land cover of the proposed site area and its associated corridors and access areas.	Habitat of principal importance from Natural England inventory	Potential to support protected species	RAG rating
	Parkland/scattered trees	9km (2.95km site area) (1.69km Indicative WWTP footprint)	N/A	Potentially	Bats, badgers, barn owls and breeding birds	
	Semi-improved grassland	47.91 ⁸³ (7.39 site area) (2.70 indicative WWTP footprint)	6.39	N	Breeding birds and reptiles	
	Improved grassland	34.52 (1.93 site area)	4.60	N	Breeding birds, and reptiles	
	Other tall herb and fern - ruderal	0.11	0.01	N	Breeding birds, reptiles and amphibians	
	Standing Water	3.43	0.46	Potentially	Water voles, otters, great crested newt, aquatic invertebrates and spined loach	
	Running Water	1.49	0.20	Potentially	Water voles, otters, great crested newt, aquatic invertebrates and spined loach	
	Dry Ditch	12.03km (1.90 km site area and 0.05 km indicative WWTP footprint)	1.60	N	N/A	
	Species poor Hedgerow	7.94km ⁸⁴ (1.06 km site area 0.40 km indicative WWTP area)	N/A	N	Badgers, breeding birds and amphibians	

⁸³ Semi Improved Grassland habitat type combines the approximate area of B2.2 - Neutral grassland - semi-improved and B6 - Poor semi-improved grassland habitat types together.

⁸⁴ Species poor hedgerow habitat type combines the approximate area of J2.1.2 - Intact hedge - species-poor, J2.2.2 - Defunct hedge - species-poor and J2.3.2 - Hedge with trees - species-poor habitat types together.

Site area	Habitat type (habitats in bold are HPI from Natural England inventory) ⁷⁷	Approximate area (ha) or length (km) ⁷⁸ (site area and indicative WWTP footprint in brackets) ⁷⁹	Approximate % land cover of the proposed site area and its associated corridors and access areas.	Habitat of principal importance from Natural England inventory	Potential to support protected species	RAG rating
	Species rich Hedgerow	2.51 km (0.39 km site area)	N/A	Y	Badgers, breeding birds and amphibians	
	Arable land	485.71 (55.78 site area and 19.33 indicative WWTP footprint)	64.76	N	Breeding and over-wintering birds	
	Amenity Grassland	49.71(0.76 site area and 0.04 indicative WWTP footprint)	6.63	N	N/A	
	Other habitat	75.08 ⁸⁵ (0.57 site area and 0.01 indicative WWTP footprint)	10.01	N	Bats and breeding birds	
	Coastal and floodplain grazing marsh	3.52	N/A	Y	Breeding and over-wintering birds	
	Traditional orchard	0.36	N/A	Y	Breeding birds, terrestrial Invertebrates	
	Deciduous woodland	6.34 (1.48 site area)	N/A	Y	Bats, badgers, barn owls and breeding birds	
	No main habitat but additional habitats present ⁸⁶	0.01	N/A	Y	N/A	

⁸⁵ Other habitat type combines the approximate areas of JNCC Phase 1 habitat types J5 Hardstanding, J3.6 Buildings, J3.4 Caravan site, J4 Bare ground and J5 Other habitat. These habitats types in most cases are of low ecological value, apart from when buildings may support bat roosts.

⁸⁶ Where candidate habitats remain but no main habitat can be identified the whole polygon is mapped as 'No main habitat but additional habitats' and the priority habitats thought to be present are shown within the attribution as additional habitats.

Site area	Habitat type (habitats in bold are HPI from Natural England inventory) ⁷⁷	Approximate area (ha) or length (km) ⁷⁸ (site area and indicative WWTP footprint in brackets) ⁷⁹	Approximate % land cover of the proposed site area and its associated corridors and access areas.	Habitat of principal importance from Natural England inventory	Potential to support protected species	RAG rating
1b	Broadleaved woodland	11.27 ⁸⁷ (1.68 site area)	1.32	Y	Bats, badgers, barn owls and breeding birds	Amber
	Coniferous woodland	1.13 ⁸⁸	0.13	N	Bats, badgers, barn owls and breeding birds	
	Mixed woodland	8.85	1.03	Potentially	Bats, badgers, barn owls and breeding birds	
	Scrub	5.03 ⁸⁹	0.59	N	Badgers, breeding birds and amphibians	
	Parkland/scattered trees	8.70 km. (0.14 km site area)	N/A	Potentially	Bats, badgers, barn owls and breeding birds	
	Semi-improved grassland	65.60 ⁹⁰ (7.39 site area) (2.70 indicative WWTP footprint)	7.67	N	Breeding birds and reptiles	
	Improved grassland	34.58 (1.93 site area)	4.04	N	Breeding birds, and reptiles	
	Other tall herb and fern - ruderal	0.26	0.03	N	Breeding birds, reptiles and amphibians	
	Swamp	0.36	N/A	Y	Breeding birds and amphibians	

⁸⁷ Deciduous woodland habitat type combines the approximate area of A1.1.1 Broadleaved Woodland - semi-natural and A1.1.2 Broadleaved Woodland – plantation habitat types together.

⁸⁸ Coniferous woodland habitat type combines the approximate area of A1.2.1 Coniferous Woodland – semi natural and A1.2.2 Coniferous Woodland – plantation habitat types together.

⁸⁹ Scrub habitat type combines the approximate area of A2.1 - Scrub - dense/continuous and A2.2 - Scrub – scattered habitat types together.

⁹⁰ Semi Improved Grassland habitat type combines the approximate area of B2.2 - Neutral grassland - semi-improved and B6 - Poor semi-improved grassland habitat types together.

Site area	Habitat type (habitats in bold are HPI from Natural England inventory) ⁷⁷	Approximate area (ha) or length (km) ⁷⁸ (site area and indicative WWTP footprint in brackets) ⁷⁹	Approximate % land cover of the proposed site area and its associated corridors and access areas.	Habitat of principal importance from Natural England inventory	Potential to support protected species	RAG rating
	Standing Water	3.59	0.73	Potentially	Water voles, otters, great crested newts, aquatic invertebrates and spined loach	
	Running Water	6.45	0.75	Potentially	Water voles, otters, amphibians, aquatic invertebrates and spined loach	
	Dry Ditch	6.26km (1.90 km site area and 0.05 km indicative WWTP footprint)	0.73	N	N/A	
	Species poor Hedgerow	8.80km. ⁹¹ (1.06 km site area and 0.40 km indicative WWTP footprint)	N/A	N	Badgers, breeding birds and amphibians	
	Species rich Hedgerow	4.03km (0.39 km site area)	N/A	Y	Badgers, breeding birds and amphibians	
	Arable land	549.04 (55.78 site area and 19.33 indicative WWTP footprint)	64.19	N	Breeding and over-wintering birds	
	Amenity Grassland	68.94 (0.76 site area)	8.06	N	N/A	
	Other habitat ⁹²	84.73 (0.57 Site area and 0.01 indicative WWTP footprint)	9.91	N	Bats, Barn owls and breeding birds	

⁹¹ Species poor hedgerow habitat type combines the approximate area of J2.1.2 - Intact hedge - species-poor, J2.2.2 - Defunct hedge - species-poor and J2.3.2 - Hedge with trees - species-poor habitat types together.

⁹² Other habitat type combines the approximate area of J5 Hardstanding, J3.6 Buildings, J3.4 Caravan site, J4 Bare ground, J5 Other habitat .and I2.4 -Refuse-tip These habitats types in most cases are of low ecological value, apart from when buildings may support bat roosts.

Site area	Habitat type (habitats in bold are HPI from Natural England inventory) ⁷⁷	Approximate area (ha) or length (km) ⁷⁸ (site area and indicative WWTP footprint in brackets) ⁷⁹	Approximate % land cover of the proposed site area and its associated corridors and access areas.	Habitat of principal importance from Natural England inventory	Potential to support protected species	RAG rating
	Coastal and floodplain grazing marsh	9.76	N/A	Y	Breeding and over-wintering birds	
	Traditional orchard	0.36	N/A	Y	Bats, Breeding birds, terrestrial Invertebrates	
	Deciduous woodland	2.98 (1.48 site area)	N/A	Y	Bats, badgers, barn owls and breeding birds	
	No main habitat but additional habitats present	0.01	N/A	Y	N/A	
2a	Broadleaved woodland	28.50 ⁹³ (1.87 site area and 0.85 indicative WWTP footprint)	2.77	Y	Bats, badgers, barn owls and breeding birds	Amber
	Coniferous woodland	1.01 ⁹⁴	0.10	N	Bats, badgers, barn owls and breeding birds	
	Mixed woodland	9.31 (0.07 site area)	0.91	Potentially	Bats, badgers, barn owls and breeding birds	
	Scrub	7.59 ⁹⁵ (0.04 site area)	0.74	N	Badgers, breeding birds and great crested newts	
	Parkland/scattered trees	4.55km (0.02km site area)	N/A	Potentially	Bats, badgers, barn owls and breeding birds	

⁹³ Broadleaved woodland habitat type combines the approximate area of A1.1.1 Broadleaved Woodland - semi-natural and A1.1.2 Broadleaved Woodland – plantation habitat types together.

⁹⁴ Coniferous woodland habitat type combines the approximate area of A1.2.1 Coniferous Woodland – semi natural and A1.2.2 Coniferous Woodland – plantation habitat types together.

⁹⁵ Scrub habitat type combines the approximate area of A2.1 - Scrub - dense/continuous and A2.2 - Scrub – scattered habitat types together.

Site area	Habitat type (habitats in bold are HPI from Natural England inventory) ⁷⁷	Approximate area (ha) or length (km) ⁷⁸ (site area and indicative WWTP footprint in brackets) ⁷⁹	Approximate % land cover of the proposed site area and its associated corridors and access areas.	Habitat of principal importance from Natural England inventory	Potential to support protected species	RAG rating
	Semi-improved grassland	65.09 ⁹⁶ (1.71 site area and 0.53 indicative WWTP footprint)	6.33	N	Breeding birds and reptiles	
	Improved grassland	54.92 (0.02)	5.34	N	Breeding birds, and reptiles	
	Other tall herb and fern - ruderal	0.08	0.02	N	Breeding birds, reptiles and amphibians	
	Standing Water	2.80	0.27	Potentially	Water voles, otters, amphibians, aquatic invertebrates and spined loach	
	Running Water	1.49	0.15	Potentially	Water voles, otters, amphibians, aquatic invertebrates and spined loach	
	Dry Ditch	14.51km (0.11km site area and 0.04km indicative WWTP footprint)	1.41	N	N/A	
	Species poor Hedgerow	11.34km ⁹⁷ (1.78 km site area) (0.50km indicative WWTP footprint)	1.10	N	Badgers, breeding birds and amphibians	
	Species rich Hedgerow	2.71km (0.16 km site area)	0.26	Y	Badgers, breeding birds and amphibians	

⁹⁶ Semi Improved Grassland habitat type combines the approximate area of B2.2 - Neutral grassland - semi-improved, B3.2 - Calcareous grassland - semi-improved and B6 - Poor semi-improved grassland habitat types together.

⁹⁷ Species poor hedgerow habitat type combines the approximate area of J2.1.2 - Intact hedge - species-poor and J2.3.2 - Hedge with trees - species-poor habitat types together.

Site area	Habitat type (habitats in bold are HPI from Natural England inventory) ⁷⁷	Approximate area (ha) or length (km) ⁷⁸ (site area and indicative WWTP footprint in brackets) ⁷⁹	Approximate % land cover of the proposed site area and its associated corridors and access areas.	Habitat of principal importance from Natural England inventory	Potential to support protected species	RAG rating
	Arable land	511.62 (49.34 site area and 20.98 indicative WWTP footprint)	49.77	N	Breeding and over-wintering birds	Amber
	Amenity Grassland	41.03 (0.01 site area)	3.99	N	N/A	
	Other habitat ⁹⁸	276.37 (1.10 site area)	26.88	N	Bats and breeding birds	
	Coastal and floodplain grazing marsh	3.51	N/A	Y	Breeding and over-wintering birds	
	Traditional orchard	0.36	N/A	Y	Bats, Breeding birds, terrestrial invertebrates	
	Deciduous woodland	10.13 (0.24 site area)	N/A	Y	Bats, badgers, barn owls and breeding birds	
	No main habitat but additional habitats present	0.01	N/A	Y	N/A	
2b	Broadleaved woodland	22.42 (1.88 site area and 0.85 indicative WWTP footprint)	2.63	Y	Bats, badgers, barn owls and breeding birds	
	Coniferous woodland	10.08 (0.07 site area)	1.18	N	Bats, badgers, barn owls and breeding birds	
	Mixed woodland	9.31	1.09	Potentially	Bats, badgers, barn owls and breeding birds	

⁹⁸ Other habitat type combines the approximate area of J5 Hardstanding, J3.6 Buildings, J3.4 Caravan site, J4 Bare ground, J5 Other habitat .and I2.4 -Refuse-tip. These habitats types in most cases are of low ecological value, apart from when buildings may support bat roosts.

Site area	Habitat type (habitats in bold are HPI from Natural England inventory) ⁷⁷	Approximate area (ha) or length (km) ⁷⁸ (site area and indicative WWTP footprint in brackets) ⁷⁹	Approximate % land cover of the proposed site area and its associated corridors and access areas.	Habitat of principal importance from Natural England inventory	Potential to support protected species	RAG rating
	Scrub	9.19 ⁹⁹ (0.04 site area)	1.08	N	Badgers, breeding birds and great crested newts	
	Parkland/scattered trees	9.73 (0.02km site area)	N/A	Potentially	Bats, badgers, barn owls and breeding birds	
	Semi-improved grassland	86.11 ¹⁰⁰ (1.71 site area and 0.53 indicative WWTP footprint)	10.10	N	Breeding birds and reptiles	
	Improved grassland	55.13	6.47	N	Breeding birds, and reptiles	
	Tall herb and fern - ruderal	0.34	0.04	N	Breeding birds, reptiles and amphibians	
	Swamp	0.36	N/A	Y	Breeding birds and amphibians	
	Standing Water	6.63 ¹⁰¹	0.78	Potentially	Water voles, otters, great crested newts, aquatic invertebrates and spined loach	
	Running Water	6.57 ¹⁰²	0.77	Potentially	Water voles, otters, great crested newts, aquatic invertebrates and spined loach	

⁹⁹ Scrub habitat type combines the approximate area of A2.1 - Scrub - dense/continuous and A2.2 - Scrub – scattered habitat types together.

¹⁰⁰ Semi Improved Grassland habitat type combines the approximate area of B2.2 - Neutral grassland - semi-improved, B3.2 - Calcareous grassland - semi-improved and B6 - Poor semi-improved grassland habitat types together.

¹⁰¹ Standing Water habitat type combines the approximate area of G1 - Standing water, G1.1 - Standing water – eutrophic and G1.2 - Standing water – mesotrophic habitats together.

¹⁰² Running Water habitat type combines approximate area of G2 -Running water and 62.2 Running Water - mesotrophic

Site area	Habitat type (habitats in bold are HPI from Natural England inventory) ⁷⁷	Approximate area (ha) or length (km) ⁷⁸ (site area and indicative WWTP footprint in brackets) ⁷⁹	Approximate % land cover of the proposed site area and its associated corridors and access areas.	Habitat of principal importance from Natural England inventory	Potential to support protected species	RAG rating
	Dry Ditch	14.95km (1.11km site area and 0.40km indicative WWTP footprint)	1.75	N	N/A	
	Species poor Hedgerow	12.54km ¹⁰³ (1.78 km site area) (0.50km indicative WWTP footprint)	N/A	N	Badgers, breeding birds and amphibians	
	Species rich Hedgerow	4.24km ¹⁰⁴ (0.16km site area)	N/A	Y	Badgers, breeding birds and amphibians	
	Arable land	486.85 (49.34 site area and 20.98 indicative WWTP footprint)	57.10	N	Breeding and over-wintering birds	
	Amenity Grassland	49.71 (0.01 site area)	5.83	N	N/A	
	Other habitat ¹⁰⁵	75.07 (1.10 site area)	8.80	N	Bats, Barn owls and breeding birds	
	Coastal and floodplain grazing marsh	9.76	N/A	Y	Breeding and over-wintering birds	
	Traditional orchard	0.23	N/A	Y	Bats, Breeding birds, terrestrial Invertebrates	
	Deciduous woodland	6.17 (0.24 site area)	N/A	Y	Bats, badgers, barn owls and breeding birds	

¹⁰³ Species poor hedgerow habitat type combines the approximate area of J2.1.2 - Intact hedge - species-poor and J2.3.2 - Hedge with trees - species-poor habitat types together.

¹⁰⁴ Species Rich Hedgerow habitat type combines the approximate area of J2.3.1 – Hedge with trees-native species-rich and J2.1. – Intact hedge-native species-rich

¹⁰⁵ Other habitat type combines the approximate area of J5 Hardstanding, J3.6 Buildings, J3.4 Caravan site, J4 Bare ground, J5 Other habitat .and I2.4 -Refuse-tip

Site area	Habitat type (habitats in bold are HPI from Natural England inventory) ⁷⁷	Approximate area (ha) or length (km) ⁷⁸ (site area and indicative WWTP footprint in brackets) ⁷⁹	Approximate % land cover of the proposed site area and its associated corridors and access areas.	Habitat of principal importance from Natural England inventory	Potential to support protected species	RAG rating
	No main habitat but additional habitats present	0.01	N/A	Y	N/A	Amber
3	Broadleaved woodland	17.39 ¹⁰⁶ (0.35 site area)	1.06	Y	Bats, badgers, barn owls and breeding birds	
	Coniferous woodland	0.06	0.00	N	Bats, badgers, barn owls and breeding birds	
	Mixed woodland	3.87	0.23	Potentially	Bats, badgers, barn owls and breeding birds	
	Scrub ¹⁰⁷	4.12	0.25	N	Badgers, breeding birds and amphibians	
	Parkland/scattered trees	8.14 ¹⁰⁸	0.49	Potentially	Bats, badgers, barn owls and breeding birds	
	Semi-improved grassland	33.03 ¹⁰⁹ (1.25 site area)	2.01	N	Breeding birds and reptiles	
	Improved grassland	14.11 (0.03 site area)	0.86	N	Breeding birds, and reptiles	
	Swamp	1.08	N/A	Y	Breeding birds and amphibians	

¹⁰⁶ Broadleaved woodland habitat type combines the approximate area of A1.1.1 Broadleaved Woodland - semi-natural and A1.1.2 Broadleaved Woodland – plantation habitat types together.

¹⁰⁷ Scrub habitat type combines the approximate area of A2.1 - Scrub - dense/continuous and A2.2 - Scrub – scattered habitat types together.

¹⁰⁸ Parkland/scattered trees habitat type combines the approximate area of A3.1 - Broadleaved parkland/scattered trees and A3.3 - Mixed parkland/scattered trees habitat types together.

¹⁰⁹ Semi Improved Grassland habitat type combines the approximate area of B2.2 - Neutral grassland - semi-improved and B6 - Poor semi-improved grassland habitat types together.

Site area	Habitat type (habitats in bold are HPI from Natural England inventory) ⁷⁷	Approximate area (ha) or length (km) ⁷⁸ (site area and indicative WWTP footprint in brackets) ⁷⁹	Approximate % land cover of the proposed site area and its associated corridors and access areas.	Habitat of principal importance from Natural England inventory	Potential to support protected species	RAG rating
	Standing Water	0.06 ¹¹⁰	0.00	Potentially	Water voles, otters, great crested newts, aquatic invertebrates and spined loach	
	Running Water	0.10 ¹¹¹	0.01	Potentially	Water voles, otters, great crested newts, aquatic invertebrates and spined loach	
	Dry Ditch	13.03km (3.51km site area and 1.29km indicative WWTP footprint)	0.79	N	N/A	
	Species rich hedgerow	4.41km ¹¹² (2.26km site area and 0.60km indicative WWTP footprint)	N/A	Y	Badgers, breeding birds and amphibians	
	Species poor Hedgerow	12.87km ¹¹³ (3.64km site area and 1.31km indicative WWTRP footprint)	N/A	N	Badgers, breeding birds and amphibians	
	Arable land	719.46 (124.22 site area and 21.99 indicative WWTP footprint)	43.73	N	Breeding and over-wintering birds	

¹¹⁰ Standing Water habitat type combines the approximate area of G1 - Standing water, G1.1 - Standing water – eutrophic and G1.2 - Standing water – mesotrophic habitats together.

¹¹¹ Running Water habitat type combines approximate area of G2 -Running water and G2.2 Running Water - mesotrophic

¹¹² Species Rich Hedgerow habitat type combines the approximate area of J2.3.1 – Hedge with trees-native species-rich and J2.1. – Intact hedge-native species-rich

¹¹³ Species poor hedgerow habitat type combines the approximate area of J2.1.2 - Intact hedge - species-poor and J2.3.2 - Hedge with trees - species-poor habitat types together.

Site area	Habitat type (habitats in bold are HPI from Natural England inventory) ⁷⁷	Approximate area (ha) or length (km) ⁷⁸ (site area and indicative WWTP footprint in brackets) ⁷⁹	Approximate % land cover of the proposed site area and its associated corridors and access areas.	Habitat of principal importance from Natural England inventory	Potential to support protected species	RAG rating
	Amenity Grassland	31.87 (0.04 site area and 0.11 indicative WWTP footprint)	1.94	N	N/A	
	Other habitat ¹¹⁴	782.70 (0.85 site area and 0.024 indicative WWTP footprint)	47.57	N	Bats, Barn Owls and breeding birds	
	Coastal and floodplain grazing marsh	20.59	N/A	Y	Breeding and over-wintering birds	
	Deciduous woodland	11.69	N/A	Y	Bats, badgers, barn owls and breeding birds	
	No main habitat but additional habitats present	0.00	N/A	Y	N/A	

¹¹⁴ Other habitat type combines the approximate area of J5 Hardstanding, J3.6 Buildings, J3.4 Caravan site, J4 Bare ground, J5 Other habitat .and I2.4 -Refuse-tip. These habitats types in most cases are of low ecological value, apart from when buildings may support bat roosts.

Table H.96: Summary of the extended phase 1 habitat survey protected species target notes within the indicative WWTP footprint and site areas

Site	Extended Phase 1 habitat survey target notes	Protected species potential
Indicative WWTP footprint 1	Various discarded piles of disused wire fencing, plastic piping, wood and hay piles. Potential reptile refugia with suitable reptile habitat surrounding the refugia.	Potential Reptile Habitat
	Poor semi-improved grassland field margins around the polytunnels	Potential Reptile Habitat
	Bird box	Breeding bird potential
	Drainage ditch holds little water, a few cm's deep, Low potential for otter, water vole, as the ditch is too narrow and shallow. The habitat surrounding the ditch is suitable for reptiles.	Potential Reptile Habitat
	Breeding bird habitat along tree lines	Breeding birds
	Polytunnels present	None
	Poor semi-improved grassland field margins around the polytunnels.	Potential Reptile habitat
Site area 1	Potential reptile refugia with suitable reptile habitat surrounding the refugia.	Potential Reptile Habitat
	Potential reptile refugia with suitable reptile habitat surrounding the refugia and rabbit warren.	Potential Reptile Habitat and Rabbit Warren
	Potential reptile refugia with suitable habitat surrounding the refugia.	Potential Reptile Habitat
	Potential habitat for breeding birds and reptiles.	Reptile and breeding bird potential habitat
	Mere Way PRoW - hedgerow corridor, at base of which is broad, relatively floristically rich grassland bordering footpath. Hedge comprises willows, lime, poplar, ash, hawthorn, aspen, sycamore and oak, with some elm and old blackthorn.	Bird, reptile, bats, botanical, invertebrates.
	Rough grassland, semi- improved frequent species of; Hawkweed oxtongue, Ribwort plantain, Cirsium arvense and Poa pratensis. Oxeye daisy (R) and Ragwort (R)	Reptile, birds, botanical

Site	Extended Phase 1 habitat survey target notes	Protected species potential
	Standalone Fraxinus excelsior with cavities in main branches ~2m up. Facing north-east. Moderate as poor habitat and no connectivity.	Bats
	Mammal paths, badger footprints, and evidence of badger foraging in fields.	Badger
	Dry ditch, with plant species of Urtica dioica dominant in narrow channel with Typha latifolia (R) Great willowherb and Hemlock (F).	Reptiles
	Large brash pile with potential as reptile refugia, overgrowth includes common nettle (D), Scentless mayweed and Bristly oxtongue (O).	Reptiles
	Potential along lightly managed hedgerow for foraging and commuting bats, Badger, Breeding birds and reptiles. Rabbits seen and many holes along length of hedgerow.	Bats, badger, breeding birds, reptiles
	Possible badger annex sett. No dung pits found.	Badger
	Rabbit warrens	Rabbit
	Breeding bird habitat along tree line. Hedgerow trees have negligible bat roosting potential. Linear features all have commuting and foraging value to local bat populations.	Breeding bird and Bat foraging potential habitat
Indicative WWTP footprint 2	Badger outlier sett. Many rabbit holes adjacent. Needs further survey.	Badger sett and path
	Rot hole in common lime with potential for roosting bats. Feature is facing north-east at 2.5m in height on main trunk.	Bat roosting potential tree
	Potential reptile refugia with suitable reptile habitat surrounding refugia.	Potential Reptile Habitat
	Brash pile, providing potential reptile refugia with suitable reptile habitat surrounding refugia.	Potential Reptile Habitat
	Dead tree with woodpecker hole at 3m in height on main trunk, facing north-east.	Bat roosting potential tree

Site	Extended Phase 1 habitat survey target notes	Protected species potential
	Reptile refugia with suitable habitat surrounding refugia.	Potential Reptile habitat
	Unknown tree with two woodpecker holes facing north east and east.	Bat roosting potential tree
	Potential reptile refugia at edge of woodland plantation	Potential Reptile habitat
	Common lime tree with rot hole feature at 3m in height, facing north.	Bat roosting potential tree
	Likely main badger sett.	Badger sett
	Woodland - impressive quantity of dead wood, both standing and fallen – lime, ash and oak primarily; also present are hawthorn, sycamore, elder, field and Norway maples, pine and horse-chestnut. No elms present	Terrestrial invertebrates
	Dead tree with visible features. Needs further bat assessment.	Bat roosting potential tree
Site area 2	Potential badger outlier.	Badger sett
	Potential reptile refugia along Meres Way with suitable reptile habitat surrounding the refugia.	Potential reptile habitat
	Suitable habitat for breeding birds and reptiles.	Potential Breeding bird and reptile habitat
	Common ash tree in hedgerow with woodpecker hole at 4m in height, facing south-west and another woodpecker hole, located further down the trunk facing west. There are two additional woodpecker holes facing NE at similar heights. And one Pedunculate oak with suitable ivy cover for roosting bats.	Bat roosting potential trees
	Common ash tree in hedgerow with south-east facing woodpecker hole and two north and northwest facing woodpecker holes at 4m in height.	Bat roosting potential tree
	All tree lines along field margins present linear features for bats to commute and forage along. The trees along the field margins require an appraisal from the ground to assess Potential Roost Features.	Bat roosting potential trees and bat foraging and commuting habitat
	Mammal pathway (several along hedgerow)	Mammal path

Site	Extended Phase 1 habitat survey target notes	Protected species potential
	Mammal pathway likely used by badgers.	Possible badger path
	Common ash in hedgerow with bat roosting potential. Woodpecker hole facing north at 4m in height up the main trunk.	Bat roosting potential tree
	Common ash in hedgerow with bat roosting potential. Woodpecker hole facing north-east on main trunk.	Bat roosting potential tree
	Two common ash trees in hedgerow with bat roosting potential, one tree has a woodpecker hole at 2m in height on the main trunk facing north-west. The other tree has a tear out cavity, facing west at 4m in height on the main trunk and the feature may not lead anywhere. Both trees are suitable for climbing.	Bat roosting potential trees
	Badger dung pit on field margin.	Badger evidence
	Common ash tree with single woodpecker hole facing north west at 5m in height on a branch.	Bat roosting potential tree
	Discarded concrete with potential as reptile refugia with suitable reptile habitat surrounding refugia.	Potential reptile habitat
	Rot hole at 3m in height in common lime tree located at a north facing direction.	Bat roosting potential tree
	Sycamore with bat roosting potential, Ivy cover. Northern boundary of plantation.	Bat roosting potential tree
	Rabbit warren/disused badger sett. Unable to see clearly amongst vegetation. Requires further survey.	Badger sett
	Mammal pathway through field crop, likely Deer and/or Badger.	Possible badger path
	Ruderal patch of spear thistle (D) bristly oxtongue (O) common nettle (F) and teasel (R)	Tall ruderal habitat
	Broadleaved woodland, little understorey. D: oak spp, F: horse chestnut, sycamore. Suitable for breeding bird nesting, reptile hibernacula potential, badger foraging.	Potential Breeding bird, badger and reptile habitat
Indicative WWTP footprint 3	Small patch of broadleaved woodland: horse chestnut, field maple, hazel. Little ground flora. Breeding bird	Potential Breeding bird, badger and reptile habitat

Site	Extended Phase 1 habitat survey target notes	Protected species potential
	nesting potential. Good badger foraging habitat. Some reptile shelter and foraging potential.	
	Defunct hedge, few species. D: Hawthorn, F: elder, bramble. Good breeding bird nesting potential.	Potential Breeding bird habitat
	One common ash tree that requires a potential roost feature close inspection from the ground. The tree has nesting barn owl potential which can be accessible using a ladder.	Barn Owl and Bat roosting potential trees
	Breeding bird potential along hedge line. Linear feature for foraging or commuting bats	Breeding bird and bat foraging potential habitat
Site area 3	Woodland in the east of site area 3 has potential to support roosting bats. Several trees with bat roosting potential. E.g. field maple with potential for roosting bats. Split in trunk may lead upwards into cavity. South-west facing feature at 2m from ground.	Bat roosting potential tree. Breeding birds.
	Patch of rare round-leaved fluellen	Rare arable plants
	Patch of dwarf spurge, currently listed on the rare plant register	Rare arable plants
	Area suitable for foraging badgers, reptiles, breeding birds and foraging/commuting bats. Note: Several Roe deer seen in area.	Potential badger, reptiles, breeding bird and commuting and foraging bats. Deer sighting
	Small patch of bramble scrub. Suitable for reptile refugia and nesting birds.	Potential Breeding bird and reptile habitat
	Hedgerow with trees, species rich. D: hawthorn, F: blackthorn, Dog rose, English ivy, elder, bramble. Good breeding bird nesting habitat. Good food source and connectivity for hazel dormice.	Breeding bird and Dormouse habitat
	Several ash trees along Low Fen Drove Way Grasslands and Hedges CWS that need ground level appraisal for bat potential roost features (PRF's).	Bat roosting potential trees
	Potential reptile refugia with suitable reptile habitat surrounding the refugia.	Potential Reptile habitat
	Hedgerow with trees, species rich. D: hawthorn, blackthorn, Dog rose, English ivy, elder, ash O:	Breeding bird and Dormouse habitat

Site	Extended Phase 1 habitat survey target notes	Protected species potential
	bramble. Good breeding bird nesting habitat. Good hazel dormouse connectivity and food source.	
	Fresh badger latrine comprising of several fresh dung piles in one dung pit.	Badger evidence
	A badger subsidiary sett.	Badger sett and evidence
	Potential outlier badger sett.	Badger sett
	Potential reptile refugia of old wooden pallets surrounded by suitable reptile habitat.	Potential Reptile habitat
	Badger dung pit, fresh Badger dung pit, old dung pit	Badger evidence
	Small area of broadleaved woodland in north-east of site area 3. D: ash, F: field maple, ground flora Lords and ladies, nettle, ground ivy, false brome, occasional hazel. Dry ditch present. Good bird nesting habitat. No bat roosting potential trees. Good badger foraging habitat.	Potential Breeding bird and badger habitat
	Small patch of broadleaved woodland north-east of WWTP footprint. D: hazel and field maple. No mature trees, no bat roosting potential trees. Good foraging habitat for badger. The habitat provides good breeding bird nesting potential.	Potential Breeding bird and badger habitat
	Hedgerow intact species rich, with trees north-east of WWTP footprint. D: hawthorn, F: blackthorn, Dog rose. English ivy, elder, ash O: honeysuckle, holly, bramble, hornbeam. Good hazel dormice habitat with connectivity, nesting and food source. Good breeding bird nesting habitat.	Potential Breeding bird and Dormouse habitat
	A pair of old tree stumps that would be of hibernation value to reptiles if present, surrounded by suitable reptile habitat.	Potential reptile habitat
	Improved grassland verge	Improved grassland
	Poor semi improved grassland. D: cocksfoot, Italian rye, common couch, O: teasel, nettle, ground ivy. Good foraging and basking habitat for reptiles. Good badger foraging habitat.	Potential reptile and badger habitat

Site	Extended Phase 1 habitat survey target notes	Protected species potential
	linear features for foraging bats, breeding bird habitat, species-poor hedge	Potential Breeding bird and bat foraging habitat
	Dry ditch in hedge. Field margin with good foraging and basking opportunities for reptiles.	Potential reptile habitat
	Old storage shed/container. Metal sheeting, asbestos tiled roof. Low bat roosting potential. Multiple openings in roof and door open with barn owl potential.	Bat and Barn owl roosting potential
	Dry ditch. Bordered by species-poor semi improved grassland. Good foraging and basking potential for reptiles.	Potential reptile habitat
	Intact hedgerow species-poor. D: hawthorn, F: blackthorn, O: Dog rose. Good breeding bird nesting habitat. Dormouse foraging potential with connectivity to wider habitat.	Potential Breeding bird and Dormouse habitat
	Low Fen Drove Way Grassland and Hedges CWS. Large dead significantly damaged standing ash at one end of hedgerow. Hedgerow spur to the west is relatively poor. No obvious nesting sites for aculeates noted, although the bee and wasp interest here may be in the presence of nectar resources.	Terrestrial invertebrates

Table H.97: Great crested newt assessment

Site area	GCN recorded within 0.5km of site area	Waterbodies and ponds within 0.25km of site area	Approximate distance from site area (km)	Location	RAG rating
1	<p>Yes:</p> <ul style="list-style-type: none"> within 0.25km of Waterbeach transfer pipeline corridor (GCN licence return). within 0.25km of diversion of existing waste water transfer network <p>Not recorded within 0.5km of site option area.</p>	<p>210 waterbodies¹¹⁵ within 0.25km of the proposed site area 1a and its associated corridors and access areas.</p>	<p>83 waterbodies within the scheme's redline boundary.</p> <p>There are 13 waterbodies within the site area 1, of those three are within the indicative WWTP footprint. At least 8 out of the 13 waterbodies were all dry (some with grass banks and hedgerows on one bank) at the time of the site visit and therefore unlikely to be suitable for great crested newts. However, at least 5 waterbodies were wet at the time of survey and 2 of the 5 waterbodies were graded as poor (>0.5), 2 were graded as average (0.6-0.7) and 1 graded as below average (0.5-0.6) using the habitat suitability index for GCN and the waterbodies have low probability to support GCN, due to no suitable ponds or GCN records within 0.25km of shortlisted site area 1.</p> <p>127 waterbodies located approximately between 0 to 0.25km from the scheme's redline boundary.</p>	Site 1a	Red
		<p>35 ponds within 0.25km of the proposed site area 1a and its associated corridors and access areas.</p>	<p>2 ponds located within the scheme's redline boundary.</p> <p>There are no ponds within the site area 1 and indicative WTTP footprint.</p> <p>32 ponds located between 0 to 0.25km from the scheme's redline boundary.</p> <p>Two ponds within 0.25km of the site area 1. One of the two ponds (PD015) wasn't habitat suitability index scored (HSI) due to a landowner request not to survey their pond. The other pond (PD019) was graded as poor (0.35) using the habitat suitability index for GCN and assessed to have low probability to support</p>	Site 1a	

¹¹⁵ The waterbodies listed within this report are a combination of drains and ditches, and these habitat features are classified as linear features rather than ponds which are known as polygon features within the GIS data set.

Site area	GCN recorded within 0.5km of site area	Waterbodies and ponds within 0.25km of site area	Approximate distance from site area (km)	Location	RAG rating
			GCN, due to a poor HSI score and no GCN records were present within 0.25km of shortlisted site area 1.		
		238 waterbodies within 0.25km of the proposed site area 1b and its associated corridors and access areas.	105 waterbodies within the scheme's redline boundary. 133 located approximately between 0 to 0.25km from the scheme's redline boundary.	Site 1b	
		36 ponds within 0.25km of the proposed site area 1b and its associated corridors and access areas.	7 ponds located within the scheme's redline boundary. One of the two ponds (PD015) wasn't habitat suitability index scored (HSI) due to a landowner request not to survey their pond. The other pond (PD019) was graded as poor (0.35) using the habitat suitability index for GCN and assessed to have low probability to support GCN, due to a poor HSI score and no GCN records were present within 0.25km of shortlisted site area 1.	Site 1b	
			29 ponds located between 0 to 0.25km from the scheme's redline boundary.		
2	Yes: <ul style="list-style-type: none"> within site area 2, but c.50m east of the indicative WWTP footprint, (GCN licence return record)¹¹⁶ within 0.25km of Waterbeach transfer pipeline corridor 	240 waterbodies within 0.25km of the proposed site area 2a and its associated corridors and access areas.	95 waterbodies within the scheme's redline boundary. There are seven waterbodies within the site area 2, of those two are within the indicative WWTP footprint. The seven waterbodies were all dry (some with grassy banks and hedgerows on one bank) at the time of the site visit and therefore unlikely to be suitable for great crested newt. 145 waterbodies located approximately between 0 to 0.25km from the scheme's redline boundary.	Site 2a	Red Within site area 2
		35 ponds within 0.25km of the proposed site area 2a and its associated corridors and access areas.	4 ponds located within the scheme's redline boundary. There are no ponds within site area 2.	Site 2a	

¹¹⁶ The record is from Natural England's Open Source data set GCN Class Licence Survey Returns. However, the grid reference and X and Y coordinates do not link to a waterbody or pond and therefore it is unknown what this positive record may relate to. During the extended Phase 1 habitat surveys there were no waterbodies with standing water recorded and no ponds.

Site area	GCN recorded within 0.5km of site area	Waterbodies and ponds within 0.25km of site area	Approximate distance from site area (km)	Location	RAG rating
			<p>31 ponds located approximately between 0 to 0.25km from the scheme's redline boundary.</p> <p>One pond within 0.25km of the shortlisted site area 2 and the indicative WWTP footprint. This pond (PD022) was graded as poor (0.48) using the habitat suitability index for GCN and due to the presence of recent GCN record within 0.25km of site 2, the pond has potential to support GCN.</p>		Red
		287 waterbodies within 0.25km of site area 2b and their associated corridors and access areas of site area 2b.	<p>129 waterbodies within the scheme's redline boundary.</p> <p>158 located approximately between 0 to 0.25km from the scheme's redline boundary.</p>	Site 2b	
		35 ponds within 0.25km of the proposed site area 2b and its associated corridors and access areas.	<p>6 ponds located within the scheme's redline boundary.</p> <p>29 ponds located approximately between 0 to 0.25km from the scheme's redline boundary.</p> <p>One pond within 0.25km of the shortlisted site area 2 and the indicative WWTP footprint. This pond (PD022) was graded as poor (0.48) using the habitat suitability index for GCN and due to the presence of recent GCN record within 0.25km of site 2, the pond has potential to support GCN.</p>	Site 2b	
3	<p>Yes:</p> <ul style="list-style-type: none"> within 0.25km and 0.5km of Waterbeach pipeline corridor <p>Not within 0.5km of site 3 area.</p>	198 waterbodies within 0.25km of the proposed site area 3 and its associated corridors and access areas.	<p>58 waterbodies within the scheme's redline boundary.</p> <p>140 located approximately between 0 to 0.25km from the scheme's redline boundary.</p> <p>There are five waterbodies within the site area 3, but none fall within the indicative WWTP footprint. The five waterbodies were all dry (some with grassy banks and hedgerows on one bank) at the time of the site visit and therefore unlikely to be suitable for great crested newt.</p>	Site 3	Amber
		10 ponds within 0.25km of the proposed site area 3 and its associated corridors and access areas.	<p>All 10 ponds are located between 0 to 0.25km from the scheme's redline boundary.</p> <p>There are no ponds within the site area 3 and indicative WWTP footprint.</p>	Site 3	

Site area	GCN recorded within 0.5km of site area	Waterbodies and ponds within 0.25km of site area	Approximate distance from site area (km)	Location	RAG rating
			<p>Three ponds within 0.25km of shortlisted site area 3. One pond was dry at the time of the site visit (P0048) and two out of three ponds (P008 and PD002) were graded as good (0.71 and 0.79) using the habitat suitability index for GCN and therefore, these ponds have potential to support GCN.</p> <p>No ponds within 0.25km of the indicative WWTP footprint.</p> <p>10 ponds within 0.25km of the total site area.</p>		

H.1.1 As noted in Paragraph 1.5.4 when assessing the unmitigated scenario, a realistic worst-case scenario has been considered, which assumes the following:

- Standard construction management controls will be implemented through a Construction Environmental Management Plan (CEMP) or similar document, details of which will be subject to submission and approval through the DCO process. Concerns for contamination or pollution of surface watercourses and groundwater will be taken into account in a detailed CEMP to be produced as a separate document and implemented on site. The CEMP will include measures to ensure that the sediment content of site runoff and dewatering from excavations is at an acceptably low level when discharged to watercourses. Temporary sustainable drainage system (SuDS) measures may be employed at sites to control discharges in periods of high rainfall. Shallow pipelines are likely to impact the groundwater in any superficial deposits, and significant dewatering may be required. Any silt-laden water from pipeline trenches would be contained or treated before discharge to local ditches or surface watercourses.
- The operation of the WWTP would be subject to emission controls to meet the requirements of the Industrial Emissions Directive.
- The operation of the WWTP would be subject to an environmental permit to meet the requirements of the Urban Waste Water Treatment Directive.

These inexecutable actions would occur with or without input from the EIA into the design process and the WWTP would not be able to operate without these permits in place.

Table H.98: Statutory designated sites RAG assessment for proposed site areas and their associated corridors and access areas

Site area	Site element ¹¹⁷	Designated site	Approximate distance (km)	SSSI Impact risk zone	Potential impact pathway	Rag analysis
Ramsar, SAC, SSSI, NNR						
1a 1b	Shortlisted site area	Wicken Fen Ramsar, SSSI and National Nature Reserve (NNR) Fenland SAC	8.8	Yes – Combustion ¹¹⁸ . Yes -Discharge ¹¹⁹ .	No discharge risk anticipated. There will be no waste water discharged to ground or surface water, it will be treated and transferred to the discharge point on the river. Air pollution/ air quality impact on designated site qualifying features. The site will include Combined Heat and Power (CHP) engines, standby boilers and backup generators, in case of emergencies. Energy plant emits pollutant emissions, which may have adverse impacts on air quality and significant effects on nearby ecological receptors. Plant will comply with Environmental Permitting Regulations as required and emissions will be regulated and mitigated accordingly. Therefore, it is highly unlikely to result in an adverse significant effect. A Stage 1 Screening Habitat Regulations Assessment (HRA) to be completed to determine likely significant effect.	Amber (Stage 1 HRA to be completed)
1a 1b	Treated effluent corridor and associated potential discharge location	Wicken Fen Ramsar, SSSI, NNR Fenland SAC	1a: 9.3 1b: 7.8	Yes -Discharge	Potential for hydrological impact. These sites are highly dependent on surface water and is subject to winter flooding, potentially connected to the River Cam. Treated water that flows towards a SSSI has the potential to impact on water quality sensitive features.	Amber (Stage 1 HRA to be completed)

¹¹⁷ Site elements refer to the proposed site areas and their associated corridors and access areas. Site elements include: shortlisted site areas, waste water transfer corridor, treated effluent corridor, site access areas, Waterbeach pipeline corridor, and diversions of existing waste water transfer network. Site elements listed vary depending on their distance from a designated site and to avoid repetition. Site elements shortlisted site area, treated effluent corridor and waterbeach pipeline corridor are always listed. The treated effluent corridor is associated with the potential discharge location into the River Cam.

¹¹⁸ All general combustion processes. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/combustion - Description may vary to specify thresholds for energy input. Emissions from combustion can cause air pollution affecting the habitats and species on SSSIs. More than 500m away from a SSSI, only combustion processes over a certain minimum size are likely to have an impact. A very large project and could cause air pollution on SSSIs up to 10km away.

¹¹⁹ Discharge category includes discharge of treated effluent and waste of more than 20m³/day to surface water of the River Cam. Any discharge of water or liquid waste that is discharged to ground (i.e. to seep away) or to surface water, such as a beck or stream (NB This does not include discharges to mains sewer which are unlikely to pose a risk at this location) - Description may vary to specify volume thresholds for discharges or to include discharges to main sewer. Most foul water is removed from a development site by a mains sewer. Where this is not the case, foul water is usually treated on site and then discharged either to ground to filter away from the site, or into a nearby watercourse. If the treated water flows towards a SSSI, it has the potential to impact on water quality sensitive features.

Site area	Site element ¹¹⁷	Designated site	Approximate distance (km)	SSSI Impact risk zone	Potential impact pathway	Rag analysis
					<p>Pollution of the River Cam or discharge of sediment-laden water to the River Cam during construction could affect downstream sites.</p> <p>Any significant adverse impacts will be avoided by measures either included in the CEMP or in the scheme design. Potential impacts during operation of the scheme, for example due to excessive variations in discharge, or discharge of effluent of an unacceptable quality, will be controlled by engineering features and operational practices included in the design and management of the scheme.</p> <p>Effluent discharge during operation.</p> <p>An improvement in the quality of the effluent discharge is foreseen as a consequence of operating the new WWTP, although inclusion of the effluent discharge from the WWTP at Waterbeach would increase the proportion of effluent in the river upstream of Waterbeach. Overall, however, an improvement in water quality is anticipated throughout the River Cam downstream of the outfall from the existing WWTP.</p> <p>Comparison of existing river quality with the prediction of quality resulting from operation of the new WWTP will be the subject of a separate assessment.</p> <p>The effluent outfall and any watercourse crossings will be designed to maintain flows at current levels and have no significant impact on flooding.</p> <p>As a result, no special mitigation measures are likely to be needed for these downstream sites.</p> <p>A Stage 1 Screening Habitat Regulations Assessment to be completed to determine likely significant effect.</p>	
1a 1b	Waterbeach pipeline corridor	Wicken Fen Ramsar, SSSI, NNR Fenland SAC	4.7	Yes – Combustion. Yes -Discharge.	SSSI impact risk zones present, however, they are not relevant to pipeline construction/operation. The construction and operation of pipeline corridor unlikely to impact qualifying features.	Green
2a 2b	Shortlisted site area	Wicken Fen Ramsar, SSSI, NNR	10.5		Over 10km from this site. Unlikely to be any significant effects on the sites qualifying features.	Green

Site area	Site element ¹¹⁷	Designated site	Approximate distance (km)	SSSI Impact risk zone	Potential impact pathway	Rag analysis
		Fenland SAC				
2a 2b	Treated effluent corridor and associated potential discharge location	Wicken Fen Ramsar, SSSI, NNR Fenland SAC	2a: 9.4 2b: 7.8	Yes – Discharge.	See text for Site 1a, 1b treated effluent corridor and associated potential discharge location	Amber (Stage 1 HRA to be completed)
2a 2b	Waterbeach pipeline corridor	Wicken Fen Ramsar, SSSI, NNR Fenland SAC	4.7	Yes – Combustion. Yes -Discharge.	SSSI impact risk zones present, however, they are not relevant to pipeline construction/operation. The construction and operation of pipeline corridor unlikely to impact qualifying features.	Green
3	Shortlisted site area	Wicken Fen Ramsar, SSSI, NNR Fenland SAC	8.3	Yes – Combustion.	Hydrological impact unlikely Air pollution/ air quality impact on designated site qualifying features. The site will include Combined Heat and Power (CHP) engines, standby boilers and backup generators, in case of emergencies. Energy plant emits pollutant emissions, which may have adverse impacts on air quality and significant effects on nearby ecological receptors. Plant will comply with Environmental Permitting Regulations as required and emissions will be regulated and mitigated accordingly. Therefore, it is highly unlikely to result in an adverse significant effect. A Stage 1 Screening Habitat Regulations Assessment (HRA) to be completed to determine likely significant effect.	Amber (Stage 1 HRA to be completed)
3	Treated effluent corridor and associated potential discharge location	Wicken Fen Ramsar, SSSI, NNR Fenland SAC	9.4	Yes – Discharge.	See text for Site 1a, 1b treated effluent corridor and associated potential discharge location	Amber (Stage 1 HRA to be completed)
3	Waterbeach pipeline corridor	Wicken Fen Ramsar, SSSI, NNR Fenland SAC	4.7	Yes -Discharge Yes - Combustion.	SSSI impact risk zone present, but the construction and operation of pipeline corridor unlikely to impact qualifying features of Wicken Fen SSSI. However, due to the pipeline construction and crossing of the River Cam a Stage 1 Screening Habitat Regulations Assessment (HRA) should be completed to determine likely significant effect. The River Cam crossing for the pipeline from Waterbeach to Site 3 would be constructed beneath	Amber (Stage 1 HRA to be completed)

Site area	Site element ¹¹⁷	Designated site	Approximate distance (km)	SSSI Impact risk zone	Potential impact pathway	Rag analysis
					the river by pipe-jacking or micro-tunnelling. Construction activities at the location would be undertaken either side of the river and away from the river banks. As a result, the construction of the crossing would not be expected to disturb the river. The CEMP implemented management measures for potential ecological impacts to control dust, water quality would mitigate construction impacts. Potential for hydrological impact. These sites are highly dependent on surface water and is subject to winter flooding, potentially connected to the River Cam.	
3	Shortlisted site area	Devils Dyke SAC	9.9	N/A	No hydrological impact expected. Air pollution/ air quality impact on designated site qualifying features. The site will include Combined Heat and Power (CHP) engines, standby boilers and backup generators, in case of emergencies. Energy plant emits pollutant emissions, which may have adverse impacts on air quality and significant effects on nearby ecological receptors. Plant will comply with Environmental Permitting Regulations as required and emissions will be regulated and mitigated accordingly. Therefore, it is highly unlikely to result in an adverse significant effect. A Stage 1 Screening Habitat Regulations Assessment (HRA) to be completed to determine likely significant effect.	Amber (Stage 1 HRA to be completed)
3	Waterbeach pipeline corridor	Devils Dyke SAC	9.7	N/A	No hydrological impact expected. Unlikely that the construction or operation of the pipeline corridor will result in an adverse significant effect on the SACs qualifying features given the distance from the proposed route.	Green
SSSIs only						
1a 1b	There are 16 SSSIs within 10km of the options 1a and 1b total area. However, not all are listed as they are considered to be of a sufficient distance from the site, no impact pathways are anticipated and or avoiding repetition. SSSIs south of the A14, south and west of Cambridge and south of Cambridge airport are excluded unless a SSSI impact risk zone falls within the site element area.					

Site area	Site element ¹¹⁷	Designated site	Approximate distance (km)	SSSI Impact risk zone	Potential impact pathway	Rag analysis
1a 1b	Shortlisted site area	Stow-cum-Quy-Fen	3.5	Yes – Combustion	Air pollution/ air quality impact on designated site qualifying features. The site will include Combined Heat and Power (CHP) engines, standby boilers and backup generators, in case of emergencies. Energy plant emits pollutant emissions, which may have adverse impacts on air quality and significant effects on nearby ecological receptors. Plant will comply with Environmental Permitting Regulations as required and emissions will be regulated and mitigated accordingly. Therefore, it is highly unlikely to result in an adverse significant effect.	Green
1a 1b	Shortlisted site area	Wilbraham Fens	5.7	Potentially – Combustion.	As above.	Green
1a 1b	Shortlisted site area	Cam Washes	6.6	Yes – combustion Yes - discharge	As above. No discharge risk anticipated. There will be no waste water discharged to ground or surface water, it will be treated and transferred to the discharge point on the river.	Green
1a 1b	Shortlisted site area	Great Wilbraham Common	8.1	Unclear, but unlikely.	Unlikely	Green
1a 1b	Shortlisted site area	Fulbourn Fen	8.9	Unclear, but unlikely.	Unlikely	Green
1a 1b	Shortlisted site area	Upware South Pit	9.3	Yes - combustion	Air pollution/ air quality impact on designated site qualifying features. The site will include Combined Heat and Power (CHP) engines, standby boilers and backup generators, in case of emergencies. Energy plant emits pollutant emissions, which may have adverse impacts on air quality and significant effects on nearby ecological receptors. Plant will comply with Environmental Permitting Regulations as required and emissions will be regulated and mitigated accordingly. Therefore, it is highly unlikely to result in an adverse significant effect.	Green
1a 1b	Shortlisted site area	Devil's Dyke	9.4	Yes - combustion	As above.	Green

Site area	Site element ¹¹⁷	Designated site	Approximate distance (km)	SSSI Impact risk zone	Potential impact pathway	Rag analysis
1a 1b	Treated effluent corridor and associated potential discharge location	Stow-cum-Quy-Fen	1a: 2.7 1b: 1.8	Yes -Discharge Yes-Infrastructure ¹²⁰ (risk zone does not cross Option 1a footprint)	No discharge risk anticipated. There will be no waste water discharged to ground or surface water, it will be treated and transferred to the discharge point on the river. No hydrological impacts expected. Infrastructure risk via the construction and operation of the treated effluent corridor unlikely to affect the qualifying features of the SSSI due to the distance from the WWTP development.	Green
1a 1b	Treated effluent corridor and associated potential discharge location	Cam Washes	1a: 7.1 1b: 5.6	Yes -Discharge	Potential for hydrological impact. The site is highly dependent on surface water and is subject to winter flooding, potentially connected to the River Cam. Treated water that flows towards a SSSI has the potential to impact on water quality sensitive features. Pollution of River Cam or discharge of sediment-laden water to the River Cam during construction could affect downstream sites. Effluent discharge during operation. Any significant adverse impacts will be avoided by measures either included in the CEMP or in the scheme design. Potential impacts during operation of the scheme, for example due to excessive variations in discharge, or discharge of effluent of an unacceptable quality, will be controlled by engineering features and operational practices included in the design and management of the scheme. An improvement in the quality of the effluent discharge is foreseen as a consequence of operating the new WWTP, although inclusion of the effluent discharge from the WWTP at Waterbeach would increase the proportion of effluent in the river upstream of Waterbeach. Overall, however, an improvement in water quality is anticipated throughout the River Cam downstream of the outfall from the existing WWTP.	Green

¹²⁰ Pipelines, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals. Pipelines, pylons and overhead cables can create a collision risk for birds and the footprint of the construction can affect local water supplies, which the SSSIs depend on. An increase in road traffic as a result of new or extended roads can cause local air pollution impacts and significant transport infrastructure projects can have impacts on water supply mechanisms, especially by introducing new drainage. New or extended aviation proposals can cause disturbance to birds, as well as collision with birds. Increased air traffic also has the potential for significant air pollution.

Site area	Site element ¹¹⁷	Designated site	Approximate distance (km)	SSSI Impact risk zone	Potential impact pathway	Rag analysis
					<p>Comparison of existing river quality with the prediction of quality resulting from operation of the new WWTP will be the subject of a separate assessment.</p> <p>As a result, no special mitigation measures are likely to be needed for this downstream site.</p> <p>The effluent outfall and any watercourse crossings will be designed to maintain flows at current levels and have no significant impact on flooding.</p>	
1a 1b	Treated effluent corridor and associated potential discharge location	Upware South Pit	1a: 9.9 1b: 8.6	Yes -Discharge	As above.	Green
2a 2b	There are 17 SSSIs within 10km of the options 2a and 2b total area. However, not all are listed as they are considered to be of a sufficient distance from the site, no impact pathways are anticipated and or avoiding repetition. SSSIs south of the A14, south and west of Cambridge and south of Cambridge airport are excluded unless a SSSI impact risk zone falls within the site element area.					
2a 2b	Shortlisted site area	Histon Road	1.4	Yes - Combustion	Air pollution/ air quality impact on designated site qualifying features. The site will include Combined Heat and Power (CHP) engines, standby boilers and backup generators, in case of emergencies. Energy plant emits pollutant emissions, which may have adverse impacts on air quality and significant effects on nearby ecological receptors. Plant will comply with Environmental Permitting Regulations as required and emissions will be regulated and mitigated accordingly. Therefore, it is highly unlikely to result in an adverse significant effect.	Green
2a 2b	Shortlisted site area	Traveller's Rest Pit	3.2	Potentially – Combustion. Difficult to identify SSSI impact risk zone presence or absence. To be confirmed with Natural England	As above.	Green

Site area	Site element ¹¹⁷	Designated site	Approximate distance (km)	SSSI Impact risk zone	Potential impact pathway	Rag analysis
2a 2b	Shortlisted site area	Stow-cum-Quy Fen	4.5	Yes – Combustion	As above.	Green
2a 2b	Shortlisted site area	Wilbraham Fens	5.6	Potentially – Combustion. Difficult to identify SSSI impact risk zone presence or absence. To be confirmed with Natural England	As above.	Green
2a 2b	Shortlisted site area	Great Wilbraham Common	8	Unclear, but unlikely. Difficult to identify SSSI impact risk zone presence or absence. To be confirmed with Natural England	Unlikely	Green
2a 2b	Shortlisted site area	Cam Washes	8.2	Yes -Discharge	No discharge risk anticipated. There will be no waste water discharged to ground or surface water, it will be treated and transferred to the discharge point on the river.	Green
2a 2b	Shortlisted site area	Fulbourn Fen	8.6	Unclear, but unlikely. Difficult to identify SSSI impact risk zone presence or absence. To be confirmed with Natural England	Unlikely	Green
2a 2b	Treated effluent corridor and	Stow-cum-Quy Fen	2a: 2.7 2b: 1.8	Yes -Discharge Yes-Infrastructure	No discharge risk anticipated. There will be no waste water discharged to ground or surface water, it will be	Green

Site area	Site element ¹¹⁷	Designated site	Approximate distance (km)	SSSI Impact risk zone	Potential impact pathway	Rag analysis
	associated potential discharge location				treated and transferred to the discharge point on the river. No hydrological impacts expected. Infrastructure risk via the construction and operation of the treated effluent corridor unlikely to affect the qualifying features of the SSSI due to the distance from the WWTP development.	
2a 2b	Treated effluent corridor and associated potential discharge location	Wilbraham Fens	3.6	Unclear, but unlikely.	Unlikely	Green
2a 2b	Treated effluent corridor and associated potential discharge location	Great Wilbraham Common	6.0	Unclear, but unlikely.	Unlikely	Green
2a 2b	Treated effluent corridor and associated potential discharge location	Cam Washes	2a: 7.2 2b: 5.6	Yes -Discharge	Potential for hydrological impact. The site is highly dependent on surface water and is subject to winter flooding, potentially connected to the River Cam. Treated water that flows towards a SSSI has the potential to impact on water quality sensitive features. Pollution of River Cam or discharge of sediment-laden water to the River Cam during construction could affect downstream sites. Effluent discharge during operation. Any significant adverse impacts will be avoided by measures either included in the CEMP or in the scheme design. Potential impacts during operation of the scheme, for example due to excessive variations in discharge, or discharge of effluent of an unacceptable quality, will be controlled by engineering features and operational practices included in the design and management of the scheme. An improvement in the quality of the effluent discharge is foreseen as a consequence of operating the new WWTP, although inclusion of the effluent discharge from the WWTP at Waterbeach would increase the proportion of effluent in the river upstream of Waterbeach. Overall, however, an improvement in water quality is anticipated	Green

Site area	Site element ¹¹⁷	Designated site	Approximate distance (km)	SSSI Impact risk zone	Potential impact pathway	Rag analysis
					<p>throughout the River Cam downstream of the outfall from the existing WWTP.</p> <p>Comparison of existing river quality with the prediction of quality resulting from operation of the new WWTP will be the subject of a separate assessment.</p> <p>As a result, no special mitigation measures are likely to be needed for this downstream site.</p> <p>The effluent outfall and any watercourse crossings will be designed to maintain flows at current levels and have no significant impact on flooding.</p>	
2a 2b	Treated effluent corridor and associated potential discharge location	Upware South Pit	1a: 9.9 1b: 8.6	Yes -Discharge	As above.	Green
3	There are 20 SSSIs within 10km of the option 3 total area. However, not all are listed as they are considered to be of a sufficient distance and or location that no impact pathways are anticipated. SSSIs south of the A14, south and west of Cambridge and south of Cambridge airport are excluded unless a SSSI impact risk zone falls within the site element area.					
3	Shortlisted site area	Stow-cum-Quy Fen	1.1	Yes -Discharge Yes-Combustion Yes – Rural non-residential ¹²¹	<p>No discharge risk anticipated. There will be no waste water discharged to ground or surface water, it will be treated and transferred to the discharge point on the river.</p> <p>Black Ditch is connected to one of the water bodies at Stow-cum-Quy Fen SSSI. As a result, there is potential, without mitigation, for surface water and groundwater impacts at the SSSI during construction, due to the drainage feature connections. However, standard mitigation measures included within the CEMP will reduce any potential surface water and groundwater impact at Stow-cum-Quy Fen SSSI to a negligible level.</p> <p>The permanent site drainage will be designed to avoid any discharge of pollutants to Black Ditch during operation of the scheme. As a result, Stow-cum-Quy</p>	Green

¹²¹ Any non-residential development outside of existing urban areas where net additional gross internal floorspace following development is 30m2 or more. – Description may vary to specify different area thresholds. Rural non-residential developments can impact on water quality, cause disturbance to birds and impact on functional land outside SSSIs, which they depend on for feeding.

Site area	Site element ¹¹⁷	Designated site	Approximate distance (km)	SSSI Impact risk zone	Potential impact pathway	Rag analysis
					<p>Fen SSSI should not be adversely affected by surface water discharge from the site.</p> <p>Consideration has also been given to the potential impacts during operation of the WWTP, due to leakage of waste water from the treatment plant, leading to contamination of groundwater in the chalk aquifer at site 3, which could adversely affect Stow-cum-Quy Fen SSSI. However, these risks would be taken into account fully in the robust design, protection measures and operational procedures for the WWTP. In addition, monitoring of groundwater and drainage in the area within and surrounding the WWTP could be implemented prior to and during the construction of the works. However, the risk of such contamination moving towards the boundary, or away from any of the sites, is considered to be low.</p> <p>A Hydrogeological Impact Assessment¹²² (HIA) has been undertaken to further assess the potential impacts outlined in the Water Resources Statement (Mott MacDonald, 2020) including on Stow-cum-Quy Fen SSSI as discussed above. The HIA modelled the potential migration of contamination in shallow groundwater to the Black Ditch in the unlikely event of a release of contaminants during construction or operation of a WWTP at site area 3. The preliminary conclusions of the HIA indicate that with appropriate construction design, management and operational management, including protection measures, it is unlikely that significant concentrations of potential contaminants will reach Black Ditch within 1,000 years and therefore, it is unlikely that there will be an adverse impact on Stow-cum-Quy Fen SSSI</p> <p>Rural non-residential developments can impact on water quality, cause disturbance to birds and impact on functional land outside SSSIs, which they depend on for feeding. However, this SSSIs qualifying features</p>	

¹²² Further assessment of the potential impacts on the water environment has been undertaken in a Hydrogeological Impact Assessment (HIA) as requested by the Environment Agency in their response to consultation. The HIA will be made available once it has been reviewed the Environment Agency

Site area	Site element ¹¹⁷	Designated site	Approximate distance (km)	SSSI Impact risk zone	Potential impact pathway	Rag analysis
					<p>are not related to birds, it is designated for its floristically rich calcareous loam pasture.</p> <p>Air pollution/ air quality impact on designated site qualifying features. The site will include Combined Heat and Power (CHP) engines, standby boilers and backup generators, in case of emergencies. Energy plant emits pollutant emissions, which may have adverse impacts on air quality and significant effects on nearby ecological receptors. Plant will comply with Environmental Permitting Regulations as required and emissions will be regulated and mitigated accordingly. Therefore, it is highly unlikely to result in an adverse significant effect.</p>	
3	Shortlisted site area	Wilbraham Fens	1.3	<p>Yes -Discharge</p> <p>Yes-Combustion</p>	<p>No discharge risk anticipated. There will be no waste water discharged to ground or surface water, it will be treated and transferred to the discharge point on the river.</p> <p>Air quality impact on designated site qualifying features. Operational traffic may require further assessment as the vehicle movements exceed the assessment thresholds within the Environmental Protection UK and Institute of Air Quality Management guidance 'Land-Use Planning and Development Control: Planning for Air Quality' (2017). Wilbraham Fens SSSI, is within 200m of the A1303, which may be used by operational traffic and therefore further assessment may be needed to determine likely effects from vehicle emissions at this site. However, although further assessment is recommended it is considered that the change in pollutant concentration as a percentage of the relevant critical level or load is likely to be less than 1%. According to the Institute of Air Quality Management (IAQM) guidance <i>A guide to the assessment of air quality impacts on designated nature conservation sites</i>¹²³, where the change in concentration</p>	Green

¹²³ Holman *et al* (2019) A guide to the assessment of air quality impacts on designated nature conservation sites – version 1.0, Institute of Air Quality Management, London. Available online at: www.iaqm.co.uk/text/guidance/airquality-impacts-on-nature-sites-2019.pdf

Site area	Site element ¹¹⁷	Designated site	Approximate distance (km)	SSSI Impact risk zone	Potential impact pathway	Rag analysis
					<p>is less than 1%, the effects can be deemed to be insignificant. Therefore, although identified as an area for further investigation, the rating has been assessed as green. Only operational traffic exceeds the thresholds for further assessments in this area. Therefore, construction has been excluded.</p> <p>The site will include Combined Heat and Power (CHP) engines, standby boilers and backup generators, in case of emergencies. Energy plant emits pollutant emissions, which may have adverse impacts on air quality and significant effects on nearby ecological receptors. Plant will comply with Environmental Permitting Regulations as required and emissions will be regulated and mitigated accordingly. Therefore, it is highly unlikely to result in an adverse significant effect.</p>	
3	Shortlisted site area	Great Wilbraham Common	3.7	Unclear, but unlikely. Difficult to identify SSSI impact risk zone presence or absence. To be confirmed with Natural England	Unlikely	Green
3	Shortlisted site area	Fulbourn Fen	4.5	Unclear, but unlikely. Difficult to identify SSSI impact risk zone presence or absence. To be confirmed with Natural England	Unlikely	Green
3	Shortlisted site area	Cam Washes	6.2	Yes -Discharge Yes - combustion	<p>No discharge risk anticipated. There will be no waste water discharged to ground or surface water, it will be treated and transferred to the discharge point on the river.</p> <p>Air pollution/ air quality impact on designated site qualifying features. The site will include Combined Heat</p>	Green

Site area	Site element ¹¹⁷	Designated site	Approximate distance (km)	SSSI Impact risk zone	Potential impact pathway	Rag analysis
					and Power (CHP) engines, standby boilers and backup generators, in case of emergencies. Energy plant emits pollutant emissions, which may have adverse impacts on air quality and significant effects on nearby ecological receptors. Plant will comply with Environmental Permitting Regulations as required and emissions will be regulated and mitigated accordingly. Therefore, it is highly unlikely to result in an adverse significant effect.	
3	Shortlisted site area	Devil's Dyke	7.8	Potentially – Combustion. Difficult to identify SSSI impact risk zone presence or absence. To be confirmed with Natural England	As above	Green
3	Shortlisted site area	Newmarket heath	8.5	Potentially – Combustion. Difficult to identify SSSI impact risk zone presence or absence. To be confirmed with Natural England	As above	Green
3	Shortlisted site area	Upware South Pit	9.2	Yes - combustion	As above	Green
3	Waterbeach pipeline corridor	Stow-cum-Quy Fen	1.1	Yes – Infrastructure	Pipeline construction impacts. Infrastructure risk via the construction and operation of the pipeline is unlikely to affect the qualifying features of the SSSI. Black Ditch could be connected to the drainage system at Stow-cum-Quy Fen SSSI. As a result, there is potential, without mitigation, for surface water impacts at the SSSI during construction at site area 3, due to the drainage feature connections. However, standard mitigation measures included within the CEMP will reduce any potential surface water impact at Stow-cum-Quy Fen SSSI to a negligible level.	Green

Site area	Site element ¹¹⁷	Designated site	Approximate distance (km)	SSSI Impact risk zone	Potential impact pathway	Rag analysis
3		Devil's Dyke	5.9	Yes – Infrastructure	Pipeline construction impacts. Infrastructure risk via the construction and operation of the pipeline is unlikely to affect the qualifying features of the SSSI.	Green
3	Treated effluent corridor and associated potential discharge location	Stow-cum-Quy Fen	1.9	Yes -Discharge	No discharge risk anticipated due to the treated effluent pipeline or tunnel. There will be no waste water discharged to ground or surface water, it will be treated and transferred to the discharge point on the river. No hydrological impacts expected.	Green
3	Treated effluent corridor and associated potential discharge location	Wilbraham Fens	2.9	Unclear, but unlikely.	Unlikely	Green
3	Treated effluent corridor and associated potential discharge location	Great Wilbraham Common	5.3	Unclear, but unlikely.	Unlikely	Green
3	Treated effluent corridor and associated potential discharge location	Cam Washes	7.2	Yes - discharge	Same for 2a above	Green
NNR only						
1a 1b	There is one National Nature Reserve within 10km of the option 1a and 1b total area.					
1a 1b	Shortlisted Site Areas ¹²⁴	Wicken Fen	8.8	N/A	No discharge risk anticipated. There will be no waste water discharged to ground or surface water, it will be treated and transferred to the discharge point on the river. Air pollution/ air quality impact on designated site qualifying features. The site will include Combined Heat and Power (CHP) engines, standby boilers and backup generators, in case of emergencies. Energy plant emits pollutant emissions, which may have	Green

¹²⁴ The closest point of site 1 to Wicken Fen NNR is the Waterbeach transfer pipeline approximately 4.7km south of the NNR.

Site area	Site element ¹¹⁷	Designated site	Approximate distance (km)	SSSI Impact risk zone	Potential impact pathway	Rag analysis
					adverse impacts on air quality and significant effects on nearby ecological receptors. Plant will comply with Environmental Permitting Regulations as required and emissions will be regulated and mitigated accordingly. Therefore, it is highly unlikely to result in an adverse significant effect.	
2a 2b	There is one National Nature Reserves within 10km of the options 2a and 2b total area.					
2a 2b	Waterbeach transfer pipeline ¹²⁵	Wicken Fen	4.7	N/A	Pipeline construction impacts. Infrastructure risk via the construction and operation of the pipeline is unlikely to affect the qualifying features of the NNR. Therefore, it is highly unlikely to result in an adverse significant effect.	Green
3	There is one National Nature Reserve within 10km of the option 3 total area.					
3	Shortlisted Site Areas	Wicken Fen	8.3	N/A	No discharge risk anticipated. There will be no waste water discharged to ground or surface water, it will be treated and transferred to the discharge point on the river. Air pollution/ air quality impact on designated site qualifying features. The site will include Combined Heat and Power (CHP) engines, standby boilers and backup generators, in case of emergencies. Energy plant emits pollutant emissions, which may have adverse impacts on air quality and significant effects on nearby ecological receptors. Plant will comply with Environmental Permitting Regulations as required and emissions will be regulated and mitigated accordingly. Therefore, it is highly unlikely to result in an adverse significant effect.	Green
LNR only						
1a 1b	There are 13 Local Nature Reserves within 10km of the options 1a and 1b total area. However, not all are listed as they are considered to be of a sufficient distance from the site, no impact pathways are anticipated and or avoiding repetition. Local Nature Reserves south of the A14, south and west of Cambridge and south of Cambridge airport are excluded.					

¹²⁵ Site area 2 is just over 10km from Wicken Fen NNR.

Site area	Site element ¹¹⁷	Designated site	Approximate distance (km)	SSSI Impact risk zone	Potential impact pathway	Rag analysis
1a 1b	Shortlisted Site Areas	Worts Meadow	0.7	N/A	Air pollution/ air quality impact on designated site qualifying features. The site will include Combined Heat and Power (CHP) engines, standby boilers and backup generators, in case of emergencies. Energy plant emits pollutant emissions, which may have adverse impacts on air quality and significant effects on nearby ecological receptors. Plant will comply with Environmental Permitting Regulations as required and emissions will be regulated and mitigated accordingly. Therefore, it is highly unlikely to result in an adverse significant effect.	Green
1a 1b	Waterbeach pipeline corridor	Worts Meadow	0.3	N/A	Pipeline construction impacts. Infrastructure risk via the construction and operation of the pipeline is unlikely to affect the qualifying features of the LNR. Therefore, it is highly unlikely to result in an adverse significant effect.	Green
2a 2b	There are 13 Local Nature Reserves within 10km of the options 2a and 2b total area. However, not all are listed as they are considered to be of a sufficient distance from the site, no impact pathways are anticipated and or avoiding repetition. Local Nature Reserves south of the A14, south and west of Cambridge and south of Cambridge airport are excluded.					
2a 2b	Shortlisted site area	Worts Meadow	2.2	N/A	Air pollution/ air quality impact on designated site qualifying features. The site will include Combined Heat and Power (CHP) engines, standby boilers and backup generators, in case of emergencies. Energy plant emits pollutant emissions, which may have adverse impacts on air quality and significant effects on nearby ecological receptors. Plant will comply with Environmental Permitting Regulations as required and emissions will be regulated and mitigated accordingly. Therefore, it is highly unlikely to result in an adverse significant effect.	Green
2a 2b	Waterbeach pipeline corridor	Worts Meadow	0.3	N/A	Pipeline construction impacts. Infrastructure risk via the construction and operation of the pipeline is unlikely to affect the qualifying features of the LNR. Therefore, it is highly unlikely to result in an adverse significant effect.	Green

Site area	Site element ¹¹⁷	Designated site	Approximate distance (km)	SSSI Impact risk zone	Potential impact pathway	Rag analysis
3	There are 13 Local Nature Reserve within 10km of the option 3 total area. However, Site 3 is considered to be of a sufficient distance from the LNRs and or there are no anticipated impact pathways that would result in a significant adverse effects. All the LNRs are south of the A14, south and west of Cambridge and south of Cambridge airport and therefore excluded.					
3	Shortlisted site area	Worts Meadow	8.3	N/A	Air pollution/ air quality impact on designated site qualifying features. The site will include Combined Heat and Power (CHP) engines, standby boilers and backup generators, in case of emergencies. Energy plant emits pollutant emissions, which may have adverse impacts on air quality and significant effects on nearby ecological receptors. Plant will comply with Environmental Permitting Regulations as required and emissions will be regulated and mitigated accordingly. Therefore, it is highly unlikely to result in an adverse significant effect.	Green
3	Waterbeach Pipeline Corridor	Worts Meadow	4.7	N/A	Pipeline construction impacts. Infrastructure risk via the construction and operation of the pipeline is unlikely to affect the qualifying features of the LNR. Therefore, it is highly unlikely to result in an adverse significant effect.	Green

Table H.99: Non-statutory designated sites RAG assessment for proposed site areas and their associated corridors and access areas

Site area	Site element	Designated site	Approximate distance (km)	Potential impact pathway	Rag analysis
1a 1b	There are 74 non-statutory designated sites (CWSs) within 5km of the options 1a and 1b total area. However, not all are listed as they are considered to be of a sufficient distance from the site, no impact pathways are anticipated and or avoiding repetition. There are no CWS within the shortlisted site area red line boundary.				
	Shortlisted site area	Cottenham Moat CWS	3.8	No obvious direct surface water connection evident from OS mapping. The moat is shown by BGS to be located on Kimmeridge Clay. However, the location is adjacent to the contact with the lower Greensand outcrop which overlies the Kimmeridge Clay. It is possible, therefore, that a connection might exist between the moat and the lower Greensand aquifer. Potential impacts of temporary dewatering in the lower Greensand aquifer during shaft construction may need to be considered at Cottenham Moat, which supports great crested newts.	Amber
	Wastewater Transfer Corridors	Milton Road Hedgerows CWS	CWS on the boundary of the wastewater transfer corridor	Potential for habitat loss from construction. Air pollution/ air quality impact on designated site qualifying features. To be controlled by CEMP.	Amber
	Treated effluent corridor and associated potential	River Cam CWS	CWS adjacent to site element	Potential for habitat loss on the banks of the River Cam. Discharge, water quality, flow and level impacts during construction and operation.	Amber

Site area	Site element	Designated site	Approximate distance (km)	Potential impact pathway	Rag analysis
	discharge location				
2a 2b	There are 79 non-statutory designated sites (CWSs) within the options 2a and 2b total area. However, not all are listed as they are considered to be of a sufficient distance from the site, no impact pathways are anticipated and or avoiding repetition. There are no CWS within the shortlisted site area red line boundary.				
	Wastewater Transfer Corridors	Milton Road Hedgerows	CWS on the boundary of the wastewater transfer corridor	Potential for habitat loss from construction. Air pollution/ air quality impact on designated site qualifying features. To be controlled by CEMP.	Amber
	Treated effluent corridor and associated potential discharge location	River Cam CWS	CWS adjacent to site element	Potential for habitat loss on the banks of the River Cam. Discharge, water quality, flow and level impacts during construction and operation.	Amber
3	There are 74 non-statutory designated sites (CWS) within the Option 3 total area. However, not all are listed as they are considered to be of a sufficient distance from the site, no impact pathways are anticipated and or avoiding repetition.				
	Shortlisted site area	Low Fen Drove Way Grasslands and Hedges CWS	Partially within the shortlisted area and associated site access areas.	Potential for habitat loss from construction Air pollution/ air quality impact on designated site qualifying features. To be controlled by CEMP.	Amber

Site area	Site element	Designated site	Approximate distance (km)	Potential impact pathway	Rag analysis
		Allicky Farm Pond CWS	0.6km north-east	Without mitigation during construction, there is potential for hydrological impacts (surface water) due to drainage feature connections. However, this should be by a CEMP.	Green
	Wastewater Transfer Corridor	Milton Road Hedgerows CWS	CWS on the boundary of the wastewater transfer corridor	Potential for habitat loss from construction. Air pollution/ air quality impact on designated site qualifying features. To be controlled by CEMP.	Amber
		Low Fen Drove Way Grasslands and Hedges CWS	CWS on the boundary of the wastewater transfer corridor	Potential for habitat loss from construction. Air pollution/ air quality impact on designated site qualifying features. To be controlled by CEMP.	Amber
	Waterbeach transfer pipeline	River Cam CWS	CWS crossed by pipeline	Potential for habitat loss on the banks of the River Cam.	Amber
	Treated effluent corridor and associated potential discharge location	River Cam CWS	CWS adjacent to site element	Potential for habitat loss on the banks of the River Cam. Discharge, water quality, flow and level impacts during construction and operation.	Amber

Table H.100: Landscape scale initiatives (green infrastructure strategies or initiatives) with links to biodiversity within the proposed site area and their associated corridors and access areas

Site area	Network enhancement zones	Green infrastructure initiatives	RAG rating
1	Network enhancement zone ¹²⁶ 1 falls within the Waterbeach pipeline corridor	The proposed Cambridgeshire Strategic Green Infrastructure Network ¹²⁷ (strategic network area 6 Cambridge and Surrounding Areas) partially falls within the proposed site area and associated corridors.	Amber
2	Network enhancement zone 1 falls within the Waterbeach pipeline corridor	The proposed Cambridgeshire Strategic Green Infrastructure Network ¹²⁷ (strategic network area 6 Cambridge and Surrounding Areas) partially falls within the proposed site area and associated corridors.	Amber
3	Network expansion zone falls within the wastewater transfer corridor ¹²⁸	The proposed National Trust's Wicken Fen Vision area falls within the proposed site area and associated corridors ¹²⁹ .	Amber
	Network expansion zone adjacent to north-eastern boundary of the shortlisted site area and Waterbeach Pipeline Corridor	The proposed Cambridgeshire Strategic Green Infrastructure Network ¹²⁷ (strategic network area 6 Cambridge and Surrounding Areas) falls within the proposed site area and associated corridors.	

¹²⁶ From a spatial dataset that describes the geographic extent and location of Habitat Networks for 18 priority habitats based primarily, but not exclusively, on the priority habitat inventory with additional data added in relation to habitat restoration-creation, restorable habitat, plus fragmentation action, and network enhancement and expansion zones. The maps are created following a standardised process that incorporates a range of data layers and identifies specific locations for a range of actions to help improve the ecological resilience for each of the habitats/habitat networks. This is the combined habitat network map. The Habitat Networks (England) comprise a series of 23 individual habitat network maps for England plus a single 'Combined Habitat Networks Map' and 3 'Grouped Habitat Networks Map'. The habitat network maps seek to apply the best evidence and principles and to use the best available nationally consistent spatial data. The habitat network maps are developed around 4 distinct habitat components sets and include 4 distinct network zones where action may be undertaken to build greater ecological resilience. Land within close proximity to the existing habitat components that are more likely to be suitable for habitat re-creation for the particular habitat. These areas are primarily based on soils but in many cases has been refined by also using other data such as hydrology, altitude and proximity to the coast. This is termed the 'Network Enhancement Zone 1'. Information available at https://naturalengland-defra.opendata.arcgis.com/datasets/fceb93850462454ab3fb5accea2be35b_0?geometry=-29.930%2C48.013%2C25.573%2C57.298

¹²⁷ Cambridgeshire's Green Infrastructure Strategy has four objectives: 1. Reverse the decline in biodiversity, 2. Mitigate and adapt to climate change, 3. Promote sustainable growth and economic development, 4. Support healthy living and wellbeing. These four objectives were agreed by the Cambridgeshire Green Infrastructure Forum and supported through public consultation. They also reflect country-wide priorities as set out in 'Cambridgeshire's Vision 2007 – 2021 and the 'Cambridgeshire Quality Charter for Growth'. The Strategy is designed to assist in shaping and co-ordinating the delivery of Green Infrastructure in the County. Available online at: <https://www.cambridge.gov.uk/media/2557/green-infrastructure-strategy.pdf> <https://www.cambridge.gov.uk/cambridgeshire-green-infrastructure-strategy#:~:text=The%20Cambridgeshire%20Green%20Infrastructure%20Strategy.now%20and%20in%20the%20future.&text=To%20promote%20sustainable%20growth%20and%20economic%20development>

¹²⁸ Land within relatively close proximity to the Network Enhancement Zones 1 & 2 that are more likely to be suitable for habitat creation for the particular habitat and identifying possible locations for connecting and linking up networks across a landscape. This is termed the 'Network Expansion Zone'. Information available at https://naturalengland-defra.opendata.arcgis.com/datasets/fceb93850462454ab3fb5accea2be35b_0?geometry=-29.930%2C48.013%2C25.573%2C57.298

¹²⁹ Wicken Fen Vision area: <https://nt.global.ssl.fastly.net/wicken-fen-nature-reserve/documents/wicken-fen-vision-strategy-document.pdf>

H.2 Protected species records

Table H.101: Protected species records within 5km of site area 1, 2 and 3

Taxon group	Common name	Latin name	Designation(s)	Site area		
				1	2	3
Amphibian	Great crested newt	<i>Triturus cristatus</i>	Habitats and Species Directive (Annex II) Wildlife and Countryside Act 1981 (Schedule 5) NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
	Common toad	<i>Bufo bufo</i>	Wildlife and Countryside Act 1981 (Schedule 5) NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Bird	Avocet	<i>Recurvirostra avosetta</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y		Y
	Barn owl	<i>Tyto alba</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
	Bearded tit	<i>Panurus biarmicus</i>	Wildlife and Countryside Act 1981 (Schedule 1)			Y
	Bewick's swan	<i>Cygnus columbianus subsp. Bewickii</i>	Wildlife and Countryside Act 1981 (Schedule 1) NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
	Bittern	<i>Botaurus stellaris</i>	Wildlife and Countryside Act 1981 (Schedule 1) NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
	Black redstart	<i>Phoenicurus ochruros</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
	Black-necked Grebe	<i>Podiceps nigricollis</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
	Black-tailed Godwit	<i>Limosa limosa</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
	Brambling	<i>Fringilla montifringilla</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
	Cetti's warbler	<i>Cettia cetti</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
	Common crossbill	<i>Loxia curvirostra</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
	Common scoter	<i>Melanitta nigra</i>	Wildlife and Countryside Act 1981 (Schedule 1)			Y
Dartford warbler	<i>Sylvia undata</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y	

Dotterel	<i>Charadrius morinellus</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Fieldfare	<i>Turdus pilaris</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Firecrest	<i>Regulus ignicapilla</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y		Y
Garganey	<i>Anas querquedula</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Greylag goose	<i>Anser anser</i>	Wildlife and Countryside Act 1981 (Schedule 1)			Y
Golden oriole	<i>Oriolus oriolus</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Goshawk	<i>Accipiter gentilis</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Green sandpiper	<i>Tringa ochropus</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Greenshank	<i>Tringa nebularia</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Hen harrier	<i>Circus cyaneus</i>	Wildlife and Countryside Act 1981 (Schedule 1) NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		Y
Hobby	<i>Falco subbuteo</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Honey-buzzard	<i>Pernis apivorus</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Kingfisher	<i>Alcedo atthis</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Leach's petrel	<i>Oceanodroma leucorhoa</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Little gull	<i>Hydrocoloeus minutus</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Little ringed plover	<i>Charadrius dubius</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Marsh harrier	<i>Circus aeruginosus</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Mediterranean gull	<i>Larus melanocephalus</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Merlin	<i>Falco columbarius</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Montagu's harrier	<i>Circus pygargus</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y		
Osprey	<i>Pandion haliaetus</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Pallid harrier	<i>Circus macrourus</i>	Wildlife and Countryside Act 1981 (Schedule 1)			
Peregrine	<i>Falco peregrinus</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Purple heron	<i>Ardea purpurea</i>	Wildlife and Countryside Act 1981 (Schedule 1)			
Quail	<i>Coturnix coturnix</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Red kite	<i>Milvus milvus</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y

Red-backed Shrike	<i>Lanius collurio</i>	Wildlife and Countryside Act 1981 (Schedule 1) NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		
Redwing	<i>Turdus iliacus</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Ruff	<i>Calidris pugnax</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y		Y
Scaup	<i>Aythya marila</i>	Wildlife and Countryside Act 1981 (Schedule 1) NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		Y
Shore lark	<i>Eremophila alpestris</i>	Wildlife and Countryside Act 1981 (Schedule 1)			
Slavonian grebe	<i>Podiceps auritus</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y		Y
Snow bunting	<i>Plectrophenax nivalis</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Spoonbill	<i>Platalea leucorodia</i>	Wildlife and Countryside Act 1981 (Schedule 1)			
Spotted crane	<i>Porzana porzana</i>	Wildlife and Countryside Act 1981 (Schedule 1)			
Stone-curlew	<i>Burhinus oediconemus</i>	Wildlife and Countryside Act 1981 (Schedule 1) NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		Y
Whimbrel	<i>Numenius phaeopus</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Whooper swan	<i>Cygnus cygnus</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Wood sandpiper	<i>Tringa glareola</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Wryneck	<i>Jynx torquilla</i>	Wildlife and Countryside Act 1981 (Schedule 1) NERC ACT 2006. Section 41: Species of Principal Importance in England		Y	Y
Goldeneye	<i>Bucephala clangula</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Greylag goose	<i>Anser anser</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Pintail	<i>Anas acuta</i>	Wildlife and Countryside Act 1981 (Schedule 1)	Y	Y	Y
Arctic skua	<i>Stercorarius parasiticus</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Brent goose	<i>Branta bernicla</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Bullfinch	<i>Pyrrhula pyrrhula</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Corn bunting	<i>Emberiza calandra</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y

Cuckoo	<i>Cuculus canorus</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Curlew	<i>Numenius arquata</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Duncock	<i>Prunella modularis</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Grasshopper warbler	<i>Locustella naevia</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Grey partridge	<i>Perdix perdix</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Hawfinch	<i>Coccothraustes coccothraustes</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	
House sparrow	<i>Passer domesticus</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Lapwing	<i>Vanellus vanellus</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Lesser redpoll	<i>Acanthis cabaret</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Lesser spotted woodpecker	<i>Dendrocopos minor</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Linnet	<i>Linaria cannabina</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Marsh tit	<i>Poecile palustris</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		
Reed bunting	<i>Emberiza schoeniclus</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Ring ouzel	<i>Turdus torquatus</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Skylark	<i>Alauda arvensis</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Song thrush	<i>Turdus philomelos</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Spotted flycatcher	<i>Muscicapa striata</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y

	Starling	<i>Sturnus vulgaris</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
	Tree pipit	<i>Anthus trivialis</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		Y
	Tree sparrow	<i>Passer montanus</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
	Turtle dove	<i>Streptopelia turtur</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
	White-fronted Goose	<i>Anser albifrons</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
	Wood warbler	<i>Phylloscopus sibilatrix</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		Y
	Yellow wagtail	<i>Motacilla flava</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
	Yellow wagtail	<i>Motacilla flava subsp. Flavissima</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England			Y
	Yellowhammer	<i>Emberiza citrinella</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Bony fish (Actinopterygii)	Brown Trout	<i>Salmo trutta subsp. fario</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England			Y
Fern	Maidenhair Fern	<i>Adiantum capillus-veneris</i>	Nationally scarce	Y		Y
Flowering plant	Annual Beard-grass	<i>Polygogon monspeliensis</i>	Nationally scarce	Y		Y
	Basil thyme	<i>Clinopodium acinos</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		
	Bermuda-grass	<i>Cynodon dactylon</i>	Nationally rare	Y		Y
	Bur medick	<i>Medicago minima</i>	Nationally scarce	Y		Y
	Chives	<i>Allium schoenoprasum</i>	Nationally scarce	Y		Y
	Corn buttercup	<i>Ranunculus arvensis</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		
	Corn cleavers	<i>Galium tricornutum</i>	Nationally rare	Y		Y
	Cornflower	<i>Centaurea cyanus</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		Y
	Dittander	<i>Lepidium latifolium</i>	Nationally scarce	Y		Y

Dwarf Mouse-ear	<i>Cerastium pumilum</i>	Nationally scarce	Y	Y	Y
Early Meadow-grass	<i>Poa infirma</i>	Nationally scarce		Y	Y
Fang-toothed Hawkweed	<i>Hieracium diaphanum</i>	Nationally rare	Y	Y	Y
Fen pondweed	<i>Potamogeton coloratus</i>	Nationally scarce	Y		Y
Few-flowered Fumitory	<i>Fumaria vaillantii</i>	Nationally scarce			Y
Fine-leaved Fumitory	<i>Fumaria parviflora</i>	Nationally scarce			Y
Fly orchid	<i>Ophrys insectifera</i>	UK BAP			Y
Fringed Water-lily	<i>Nymphoides peltata</i>	Nationally scarce	Y		Y
Fritillary	<i>Fritillaria meleagris</i>	Nationally scarce			Y
Galingale	<i>Cyperus longus</i>	Nationally scarce	Y	Y	Y
Gold-of-pleasure	<i>Camelina sativa</i>	Nationally scarce			Y
Hoary mullein	<i>Verbascum pulverulentum</i>	Nationally scarce	Y	Y	Y
Jersey cudweed	<i>Gnaphalium luteoalbum</i>	Wildlife and Countryside Act 1981 (Schedule 8)	Y	Y	Y
Marsh-mallow	<i>Althaea officinalis</i>	Nationally scarce	Y		
Mezereon	<i>Daphne mezereum</i>	Nationally scarce	Y		Y
Perennial Flax	<i>Linum perenne</i>	Nationally scarce			Y
Purple fescue	<i>Vulpia ciliata</i> subsp. <i>Ambigua</i>	Nationally scarce	Y		
Sea-buckthorn	<i>Hippophae rhamnoides</i>	Nationally scarce	Y	Y	Y
Shepherd's-needle	<i>Scandix pecten-veneris</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England			
Sickle medick	<i>Medicago sativa</i> subsp. <i>Falcata</i>	Nationally scarce			Y
Slender tare	<i>Vicia parviflora</i>	Nationally scarce	Y	Y	Y
Spreading Hedge-parsley	<i>Torilis arvensis</i>	Nationally scarce			
Stinking hellebore	<i>Helleborus foetidus</i>	Nationally scarce			Y
Tasteless Water-pepper	<i>Persicaria mitis</i>	Nationally scarce			Y
Toothed medick	<i>Medicago polymorpha</i>	Nationally scarce	Y		
Tubular Water-dropwort	<i>Oenanthe fistulosa</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England			
Wall bedstraw	<i>Galium parisiense</i>	Nationally scarce	Y		
Welsh poppy	<i>Meconopsis cambrica</i>	Nationally scarce	Y		Y

	White Helleborine	<i>Cephalanthera damasonium</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England			Y
	White mullein	<i>Verbascum lychnitis</i>	Nationally scarce	Y	Y	Y
	Yellow vetchling	<i>Lathyrus aphaca</i>	Nationally scarce		Y	
Insect - beetle (Coleoptera)	Abdera biflexuosa	<i>Abdera biflexuosa</i>	Nationally scarce			Y
	Adonis' ladybird	<i>Hippodamia (Adonia) variegata</i>	Nationally scarce	Y	Y	Y
	Agrilus (Anambus) laticornis	<i>Agrilus (Anambus) laticornis</i>	Nationally scarce			Y
	Alder flea weevil	<i>Orchestes (Orchestes) testaceus</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England			
	Amidobia talpa	<i>Amidobia talpa</i>	Nationally scarce			
	Ampedus quercicola	<i>Ampedus quercicola</i>	Nationally scarce			
	Anaglyptus mysticus	<i>Anaglyptus mysticus</i>	Nationally scarce	Y	Y	
	Anobium inexpectatum	<i>Anobium inexpectatum</i>	Nationally scarce			Y
	Anthribus nebulosus	<i>Anthribus nebulosus</i>	Nationally scarce	Y		
	Aphodius (Limarus) zenkeri	<i>Aphodius (Limarus) zenkeri</i>	Nationally scarce			Y
	Athous (Orthathous) campyloides	<i>Athous (Orthathous) campyloides</i>	Nationally scarce			Y
	Aulonium trisulcus	<i>Aulonium trisulcus</i>	Nationally scarce			
	Badister (Badister) unipustulatus	<i>Badister (Badister) unipustulatus</i>	Nationally scarce	Y		
	Bagous (Hydronomus) alismatis	<i>Bagous (Hydronomus) alismatis</i>	Nationally scarce			
	Barley flea beetle	<i>Phyllotreta vittula</i>	Nationally scarce	Y		
	Belladonna flea beetle	<i>Epitrix atropae</i>	Nationally scarce			Y
	Berosus (Berosus) luridus	<i>Berosus (Berosus) luridus</i>	Nationally scarce			
	Bloody cranesbill weevil	<i>Zacladus exiguus</i>	Nationally scarce	Y		
	Brush-thighed Seed-eater	<i>Harpalus (Harpalus) froelichii</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England			
	Carpelimus obesus	<i>Carpelimus obesus</i>	Nationally scarce			
Cassida prasina	<i>Cassida prasina</i>	Nationally scarce	Y			
Cercyon (Cercyon) bifenestratus	<i>Cercyon (Cercyon) bifenestratus</i>	Nationally scarce				
Chrysolina oricalcia	<i>Chrysolina oricalcia</i>	Nationally scarce			Y Y	
Cobweb beetle	<i>Ctesias serra</i>	Nationally scarce			Y Y	

Cossonus linearis	<i>Cossonus linearis</i>	Nationally scarce		Y
Crudosilis ruficollis	<i>Crudosilis ruficollis</i>	Nationally scarce	Y	Y Y
Demetrias (Risophilus) imperialis	<i>Demetrias (Risophilus) imperialis</i>	Nationally scarce	Y	Y Y
Diplapion stolidum	<i>Diplapion stolidum</i>	Nationally scarce	Y	Y
Diplocoelus fagi	<i>Diplocoelus fagi</i>	Nationally scarce	Y	Y
Donacia clavipes	<i>Donacia clavipes</i>	Nationally scarce		Y
Donacia dentata	<i>Donacia dentata</i>	Nationally scarce		
Donacia thalassina	<i>Donacia thalassina</i>	Nationally scarce	Y	Y
Dorytomus ictor	<i>Dorytomus ictor</i>	Nationally scarce		Y
Drupenatus nasturtii	<i>Drupenatus nasturtii</i>	Nationally scarce	Y	Y
Dryops (Dryops) similis	<i>Dryops (Dryops) similis</i>	Nationally scarce		
Eledona agricola	<i>Eledona agricola</i>	Nationally scarce		Y
Enochrus bicolor	<i>Enochrus bicolor</i>	Nationally scarce		
Enochrus quadripunctatus	<i>Enochrus quadripunctatus</i>	Nationally scarce		
Eubrychius velutus	<i>Eubrychius velutus</i>	Nationally scarce	Y	Y
Euglenes oculatus	<i>Euglenes oculatus</i>	Nationally scarce		Y
Flax flea beetle	<i>Longitarsus parvulus</i>	Nationally scarce		
Gymnetron melanarium	<i>Gymnetron melanarium</i>	Nationally scarce	Y	
Hallomenus binotatus	<i>Hallomenus binotatus</i>	Nationally scarce		Y Y
Hawthorn jewel beetle	<i>Agrilus (Anambus) sinuatus</i>	Nationally scarce		Y Y
Hydaticus seminiger	<i>Hydaticus seminiger</i>	Nationally scarce	Y	Y
Hydaticus transversalis	<i>Hydaticus transversalis</i>	Nationally scarce		
Hygrotus (Coelambus) nigrolineatus	<i>Hygrotus (Coelambus) nigrolineatus</i>	Nationally scarce		
Ischnomera cyanea	<i>Ischnomera cyanea</i>	Nationally scarce		Y Y
Ischnodes sanguinicollis	<i>Ischnodes sanguinicollis</i>	Nationally scarce		Y
Kissophagus hederæ	<i>Kissophagus hederæ</i>	Nationally scarce		Y
Longitarsus ballotæ	<i>Longitarsus ballotæ</i>	Nationally scarce		Y
Lissodema denticolle	<i>Lissodema denticolle</i>	Nationally scarce		

Longitarsus ballotae	<i>Longitarsus ballotae</i>	Nationally scarce	Y	Y
Mallow flea beetle	<i>Podagrica fuscicornis</i>	Nationally scarce	Y	Y
Malthinus balteatus	<i>Malthinus balteatus</i>	Nationally scarce		Y
Medon apicalis	<i>Medon apicalis</i>	Nationally scarce		Y
Mogulones geographicus	<i>Mogulones geographicus</i>	Nationally scarce	Y	
Musk beetle	<i>Aromia moschata</i>	Nationally scarce	Y	Y Y
Notaris scirpi	<i>Notaris scirpi</i>	Nationally scarce		Y
Ophonus (Metophonus) schaubergerianus	<i>Ophonus (Metophonus) schaubergerianus</i>	Nationally scarce	Y	
Ophonus (Ophonus) ardosiacus	<i>Ophonus (Ophonus) ardosiacus</i>	Nationally scarce	Y	
Ophonus (Ophonus) azureus	<i>Ophonus (Ophonus) azureus</i>	Nationally scarce		Y
Opilo mollis	<i>Opilo mollis</i>	Nationally scarce		Y Y
Orchesia micans	<i>Orchesia micans</i>	Nationally scarce		Y
Oulimnius major	<i>Oulimnius major</i>	Nationally scarce	Y	Y
Philonthus fumarius	<i>Philonthus fumarius</i>	Nationally scarce		Y
Phytoecia cylindrica	<i>Phytoecia cylindrica</i>	Nationally scarce	Y	Y Y
Platyderus depressus	<i>Platyderus depressus</i>	Nationally scarce	Y	Y
Platynaspis luteorubra	<i>Platynaspis luteorubra</i>	Nationally scarce	Y	
Platystethus (Craetopycrus) nodifrons	<i>Platystethus (Craetopycrus) nodifrons</i>	Nationally scarce		Y
Polydrusus (Chrysophis) formosus	<i>Polydrusus (Chrysophis) formosus</i>	Nationally scarce	Y	Y
Prionychus ater	<i>Prionychus ater</i>	Nationally scarce		Y
Pseudocistela ceramboides	<i>Pseudocistela ceramboides</i>	Nationally scarce		
Ptinus sexpunctatus	<i>Ptinus sexpunctatus</i>	Nationally scarce	Y	Y
Rhagonycha lutea	<i>Rhagonycha lutea</i>	Nationally scarce		Y
Scaphisoma boleti	<i>Scaphisoma boleti</i>	Nationally scarce		Y Y
Sepedophilus testaceus	<i>Sepedophilus testaceus</i>	Nationally scarce		Y
Smaller noterus	<i>Noterus crassicornis</i>	Nationally scarce	Y	Y
Sphindus dubius	<i>Sphindus dubius</i>	Nationally scarce		Y
Squamapion cineraceum	<i>Squamapion cineraceum</i>	Nationally scarce	Y	

	Stenus (Stenus) pusillus	<i>Stenus (Stenus) pusillus</i>	Nationally scarce		Y	
	Sunius melanocephalus	<i>Sunius melanocephalus</i>	Nationally scarce		Y	
	Trichosirocalus barnevillei	<i>Trichosirocalus barnevillei</i>	Nationally scarce	Y		
	Two-Spot Wood-Borer	<i>Agrilus (Anambus) biguttatus</i>	Nationally scarce			Y
	Wheat mud beetle	<i>Helophorus (Empleurus) nubilus</i>	Nationally scarce	Y		
Insect - butterfly	Grizzled skipper	<i>Pyrgus malvae</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		Y
	Small heath	<i>Coenonympha pamphilus</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		Y Y
	Swallowtail	<i>Papilio machaon</i>	Wildlife and Countryside Act 1981 (Schedule 5)			Y Y
	Wall	<i>Lasiommata megera</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		Y Y
	White admiral	<i>Limenitis camilla</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England			
	White-letter Hairstreak	<i>Satyrrium w-album</i>	Wildlife and Countryside Act 1981 (Schedule 5) NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		Y Y
Insect - hymenopteran	Dolichovespula (Dolichovespula) media	<i>Dolichovespula (Dolichovespula) media</i>	Nationally scarce			Y
	Five-banded Weevil-wasp	<i>Cerceris quinquefasciata</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England			Y
	Hill cuckoo bee	<i>Bombus (Psithyrus) rupestris</i>	Nationally scarce	Y		Y
	Large garden bumble bee	<i>Bombus (Megabombus) ruderatus</i>	Nationally scarce NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		Y Y
	Lasioglossum (Evylaeus) malachurum	<i>Lasioglossum (Evylaeus) malachurum</i>	Nationally scarce	Y		
	Nysson trimaculatus	<i>Nysson trimaculatus</i>	Nationally scarce			Y
Insect - moth	Alder signal	<i>Stathmopoda pedella</i>	Nationally scarce			Y
	August thorn	<i>Ennomos quercinaria</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		

Beaded chestnut	<i>Agrochola lychnidis</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Blood-vein	<i>Timandra comae</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Bordered gothic	<i>Heliophobus reticulata</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		
Brindled beauty	<i>Lycia hirtaria</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		
Brown-spot Pinion	<i>Agrochola litura</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		Y
Buff ermine	<i>Spilosoma lutea</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Bulrush veneer	<i>Calamotropha paludella</i>	Nationally scarce	Y	Y	Y
Centre-barred Sallow	<i>Atethmia centrago</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Cinnabar	<i>Tyria jacobaeae</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Crescent	<i>Celaena leucostigma</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		Y
Dark brocade	<i>Mniotype adusta</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		
Dark spinach	<i>Pelurga comitata</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Dark-barred Twin-spot Carpet	<i>Xanthorhoe ferrugata</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Deep-brown Dart	<i>Aporophyla lutulenta</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	
Dot moth	<i>Melanchra persicariae</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Dotted ermel	<i>Ethmia dodecea</i>	Nationally scarce	Y		Y
Double dart	<i>Graphiphora augur</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		
Dusky brocade	<i>Apamea remissa</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y

Dusky-lemon Sallow	<i>Cirrhia gilvago</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y
Ear moth	<i>Amphipoea oculatea</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y Y
Feathered gothic	<i>Tholera decimalis</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y Y
Garden dart	<i>Euxoa nigricans</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y Y
Garden tiger	<i>Arctia caja</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y
Ghost moth	<i>Hepialus humuli</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y
Ghost moth	<i>Hepialus humuli subsp. Humuli</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y Y
Giant Water-veneer	<i>Schoenobius gigantella</i>	Nationally scarce	Y	Y
Goat moth	<i>Cossus cossus</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y Y
Green-brindled Crescent	<i>Allophyes oxyacanthae</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y Y
Grey dagger	<i>Acronicta psi</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y Y
Hedge rustic	<i>Tholera cespitis</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	
Hollyhock seed moth	<i>Pexicopia malvella</i>	Nationally scarce	Y	
Knot grass	<i>Acronicta rumicis</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y Y
Lackey	<i>Malacosoma neustria</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y Y
Large nutmeg	<i>Apamea anceps</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y Y
Large wainscot	<i>Rhizedra lutosa</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y
Latticed heath	<i>Chiasmia clathrata</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y Y

Lunar yellow underwing	<i>Noctua orbona</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		
Minor Shoulder-knot	<i>Brachylomia viminalis</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Mottled rustic	<i>Caradrina morpheus</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Mouse moth	<i>Amphipyra tragopoginis</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Mullein Wave	<i>Scopula marginepunctata</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England			Y
Oak Hook-tip	<i>Watsonalla binaria</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		
Pale shining brown	<i>Polia bombycina</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		
Powdered quaker	<i>Orthosia gracilis</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Rosy minor	<i>Litoligia literosa</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	
Rosy rustic	<i>Hydraecia micacea</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Rustic	<i>Hoplodrina blanda</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Sallow	<i>Cirrhia icteritia</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Shaded Broad-bar	<i>Scotopteryx chenopodiata</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Shoulder-striped Wainscot	<i>Leucania comma</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Small emerald	<i>Hemistola chrysoprasaria</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Small phoenix	<i>Ecliptopera silaceata</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		Y
Small Square-spot	<i>Diarsia rubi</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y

	Spinach	<i>Eulithis mellinata</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
	Spindle Knot-horn	<i>Nephoterix angustella</i>	Nationally scarce			Y
	Sulphur pearl	<i>Sitochroa palealis</i>	Nationally scarce	Y		Y
	V-moth	<i>Macaria wauaria</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	
	White ermine	<i>Spilosoma lubricipeda</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
	White-line Dart	<i>Euxoa tritici</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	
	White-spotted Pinion	<i>Cosmia diffinis</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Insect - true bug (Hemiptera)	Agnocoris reclairei	<i>Agnocoris reclairei</i>	Nationally scarce	Y	Y	
	Anoscopus albifrons	<i>Anoscopus albifrons</i>	Nationally scarce	Y	Y	
	Tall fescue planthopper	<i>Ribautodelphax imitans</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England			Y
Insect - true fly (Diptera)	Acanthiophilus helianthi	<i>Acanthiophilus helianthi</i>	Nationally scarce			Y
	Agathomyia wankowiczii	<i>Agathomyia wankowiczii</i>	Nationally scarce			Y
	Atypophthalmus inustus	<i>Atypophthalmus inustus</i>	Nationally scarce			Y
	Aulacigaster leucopeza	<i>Aulacigaster leucopeza</i>	Nationally scarce			Y
	Beris clavipes	<i>Beris clavipes</i>	Nationally scarce			Y
	Blaesoxipha plumicornis	<i>Blaesoxipha plumicornis</i>	Nationally scarce			Y
	Brachyopa insensilis	<i>Brachyopa insensilis</i>	Nationally scarce			Y
	Brachyopa pilosa	<i>Brachyopa pilosa</i>	Nationally scarce			Y
	Cheilosia soror	<i>Cheilosia soror</i>	Nationally scarce			Y
	Cheilosia velutina	<i>Cheilosia velutina</i>	Nationally scarce			Y
	Chorisops nagatomii	<i>Chorisops nagatomii</i>	Nationally scarce	Y		
	Coenosia atra	<i>Coenosia atra</i>	Nationally scarce	Y	Y	
	Colobaea bifasciella	<i>Colobaea bifasciella</i>	Nationally scarce			Y
	Didea fasciata	<i>Didea fasciata</i>	Nationally scarce			Y
	Dioxyyna bidentis	<i>Dioxyyna bidentis</i>	Nationally scarce			Y

Drino lota	<i>Drino lota</i>	Nationally scarce		Y
Epistrophe diaphana	<i>Epistrophe diaphana</i>	Nationally scarce		Y
Eupachygaster tarsalis	<i>Eupachygaster tarsalis</i>	Nationally scarce		Y
Fannia clara	<i>Fannia clara</i>	Nationally scarce		Y
Fannia nigra	<i>Fannia nigra</i>	Nationally scarce		Y
Gnophomyia viridipennis	<i>Gnophomyia viridipennis</i>	Nationally scarce		Y
Golden Hoverfly	<i>Callicera spinolae</i>	Nationally scarce		Y
Helina abdominalis	<i>Helina abdominalis</i>	Nationally scarce		Y
Helius pallirostris	<i>Helius pallirostris</i>	Nationally scarce	Y	Y
Hercostomus nigrilamellatus	<i>Hercostomus nigrilamellatus</i>	Nationally scarce		Y
Hilara lugubris	<i>Hilara lugubris</i>	Nationally scarce		Y
Hydrotaea pilipes	<i>Hydrotaea pilipes</i>	Nationally scarce		Y
Lejogaster tarsata	<i>Lejogaster tarsata</i>	Nationally scarce	Y	Y
Lispocephala falcata	<i>Lispocephala falcata</i>	Nationally scarce		Y
Lophosia fasciata	<i>Lophosia fasciata</i>	Nationally scarce		Y
Macronychia striginervis	<i>Macronychia striginervis</i>	Nationally scarce		Y
Mallota cimbiciformis	<i>Mallota cimbiciformis</i>	Nationally scarce		Y
Merzomyia westermanni	<i>Merzomyia westermanni</i>	Nationally scarce	Y	
Mintho rufiventris	<i>Mintho rufiventris</i>	Nationally scarce		Y
Myolepta dubia	<i>Myolepta dubia</i>	Nationally scarce		Y
Neopachygaster meromelas	<i>Neopachygaster meromelas</i>	Nationally scarce		Y
Norellia spinipes	<i>Norellia spinipes</i>	Nationally scarce		Y
Odinia mejjerei	<i>Odinia mejjerei</i>	Nationally scarce		Y
Odontomyia tigrina	<i>Odontomyia tigrina</i>	Nationally scarce		Y Y
Orellia falcata	<i>Orellia falcata</i>	Nationally scarce		Y
Periscelis annulata	<i>Periscelis annulata</i>	Nationally scarce		Y
Pherbellia annulipes	<i>Pherbellia annulipes</i>	Nationally scarce		Y
Pherbellia dorsata	<i>Pherbellia dorsata</i>	Nationally scarce	Y	Y
Pherbellia nana	<i>Pherbellia nana</i>	Nationally scarce	Y	Y

	Phoenix fly	<i>Dorycera graminum</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	
	Pipizella virens	<i>Pipizella virens</i>	Nationally scarce	Y	
	Pipunculus zugmayeriae	<i>Pipunculus zugmayeriae</i>	Nationally scarce		Y
	Platypalpus articulatoides	<i>Platypalpus articulatoides</i>	Nationally scarce	Y	Y
	Platypalpus articulatus	<i>Platypalpus articulatus</i>	Nationally scarce	Y	
	Platypalpus infectus	<i>Platypalpus infectus</i>	Nationally scarce	Y	Y
	Platypalpus stigma	<i>Platypalpus stigma</i>	Nationally scarce	Y	Y
	Sapromyza opaca	<i>Sapromyza opaca</i>	Nationally scarce	Y	
	Scenopinus niger	<i>Scenopinus niger</i>	Nationally scarce		Y
	Stratiomys potamida	<i>Stratiomys potamida</i>	Nationally scarce	Y	Y Y
	Stratiomys singularior	<i>Stratiomys singularior</i>	Nationally scarce		Y
	Systemus leucurus	<i>Systemus leucurus</i>	Nationally scarce		Y
	Tachypeza fuscipennis	<i>Tachypeza fuscipennis</i>	Nationally scarce		Y
	Thecophora fulvipes	<i>Thecophora fulvipes</i>	Nationally scarce		Y
	Trachysiphonella scutellata	<i>Trachysiphonella scutellata</i>	Nationally scarce	Y	
	Triglyphus primus	<i>Triglyphus primus</i>	Nationally scarce		Y
	Typhamyza bifasciata	<i>Typhamyza bifasciata</i>	Nationally scarce	Y	Y
	Vanoyia tenuicornis	<i>Vanoyia tenuicornis</i>	Nationally scarce	Y	Y Y
	Volucella inanis	<i>Volucella inanis</i>	Nationally scarce		Y Y
	Volucella inflata	<i>Volucella inflata</i>	Nationally scarce		Y
	Volucella zonaria	<i>Volucella zonaria</i>	Nationally scarce	Y	Y Y
	Xanthandrus comtus	<i>Xanthandrus comtus</i>	Nationally scarce		Y
	Zophomyia temula	<i>Zophomyia temula</i>	Nationally scarce		Y
Lichen	Aspicilia contorta subsp. Hoffmanniana	<i>Aspicilia contorta subsp. Hoffmanniana</i>	Nationally rare	Y	Y
	Bacidia egenula	<i>Bacidia egenula</i>	Nationally scarce		Y
	Buellia badia	<i>Buellia badia</i>	Nationally scarce	Y	
	Caloplaca crenulatella	<i>Caloplaca crenulatella</i>	Nationally scarce	Y	
	Catillaria atomarioides	<i>Catillaria atomarioides</i>	Nationally scarce	Y	

	Chaenotheca brachypoda	<i>Chaenotheca brachypoda</i>	Nationally scarce			Y
	Lecania cyrtella	<i>Lecania cyrtella</i>	Nationally rare	Y	Y	Y
	Lecania hutchinsiae	<i>Lecania hutchinsiae</i>	Nationally scarce			Y
	Lecania inundata	<i>Lecania inundata</i>	Nationally scarce	Y	Y	
	Lecania rabenhorstii	<i>Lecania rabenhorstii</i>	Nationally scarce	Y		
	Lecanora persimilis	<i>Lecanora persimilis</i>	Nationally scarce	Y		
	Lecanora semipallida	<i>Lecanora semipallida</i>	Nationally scarce	Y		Y
	Placynthiella dasaea	<i>Placynthiella dasaea</i>	Nationally scarce	Y		Y
	Punctelia jeckeri	<i>Punctelia jeckeri</i>	Nationally scarce	Y		Y
	Xanthoria ucrainica	<i>Xanthoria ucrainica</i>	Nationally scarce	Y		Y
Liverwort	Micheli's Balloonwort	<i>Sphaerocarpos michelii</i>	Nationally scarce			Y
Reptile	Common lizard	<i>Zootoca vivipara</i>	Wildlife and Countryside Act 1981 (Schedule 5) NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
	Grass snake	<i>Natrix natrix</i>	Wildlife and Countryside Act 1981 (Schedule 5) NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
	Slow-worm	<i>Anguis fragilis</i>	Wildlife and Countryside Act 1981 (Schedule 5) NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Stonewort	Clustered stonewort	<i>Tolypella glomerata</i>	Nationally scarce	Y	Y	Y
	Tassel stonewort	<i>Tolypella intricata</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	
Terrestrial mammal	Brown Long-eared Bat	<i>Plecotus auritus</i>	Habitats and Species Directive (Annex II) Wildlife and Countryside Act 1981 (Schedule 5) NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
	Common pipistrelle	<i>Pipistrellus pipistrellus</i>	Habitats and Species Directive (Annex II) Wildlife and Countryside Act 1981 (Schedule 5)	Y	Y	Y
	Daubenton's bat	<i>Myotis daubentonii</i>	Habitats and Species Directive (Annex II) Wildlife and Countryside Act 1981 (Schedule 5)	Y	Y	Y
	European otter	<i>Lutra lutra</i>	Habitats and Species Directive (Annex II) Wildlife and Countryside Act 1981 (Schedule 5)	Y	Y	Y

			NERC ACT 2006. Section 41: Species of Principal Importance in England			
Long-eared Bat species	<i>Plecotus</i>		Habitats and Species Directive (Annex II) Wildlife and Countryside Act 1981 (Schedule 5)	Y	Y	Y
Natterer's bat	<i>Myotis nattereri</i>		Habitats and Species Directive (Annex II) Wildlife and Countryside Act 1981 (Schedule 5)	Y		Y
Noctule bat	<i>Nyctalus noctula</i>		Habitats and Species Directive (Annex II) Wildlife and Countryside Act 1981 (Schedule 5) NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Nyctalus Bat species	<i>Nyctalus</i>		Habitats and Species Directive (Annex II) Wildlife and Countryside Act 1981 (Schedule 5) NERC ACT 2006. Section 41: Species of Principal Importance in England			Y
Parti-coloured Bat	<i>Vespertilio murinus</i>		Habitats and Species Directive (Annex II) Wildlife and Countryside Act 1981 (Schedule 5)	Y	Y	
Pipistrelle Bat species	<i>Pipistrellus</i>		Habitats and Species Directive (Annex II) Wildlife and Countryside Act 1981 (Schedule 5)	Y	Y	Y
Serotine	<i>Eptesicus serotinus</i>		Habitats and Species Directive (Annex II) Wildlife and Countryside Act 1981 (Schedule 5)	Y	Y	Y
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>		Habitats and Species Directive (Annex II) Wildlife and Countryside Act 1981 (Schedule 5) NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Unidentified bat	<i>Myotis</i>		Habitats and Species Directive (Annex II) Wildlife and Countryside Act 1981 (Schedule 5)	Y	Y	Y
Western barbastelle	<i>Barbastella barbastellus</i>		Habitats and Species Directive (Annex II) Wildlife and Countryside Act 1981 (Schedule 5) NERC ACT 2006. Section 41: Species of Principal Importance in England			Y
Polecat	<i>Mustela putorius</i>		Habitats and Species Directive (Annex V) NERC ACT 2006. Section 41: Species of Principal Importance in England	Y		Y
Eurasian badger	<i>Meles meles</i>		Protection of Badgers Act 1992	Y	Y	Y
Bats	<i>Chiroptera</i>		Wildlife and Countryside Act 1981 (Schedule 5)	Y	Y	

European water vole	<i>Arvicola amphibius</i>	Wildlife and Countryside Act 1981 (Schedule 5) NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Brown hare	<i>Lepus europaeus</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y
Harvest mouse	<i>Micromys minutus</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England			
West European hedgehog	<i>Erinaceus europaeus</i>	NERC ACT 2006. Section 41: Species of Principal Importance in England	Y	Y	Y

Table H.102: Protected and notable species records within the indicative WWTP footprint

Site area	Reported species	Designation	Location	Year reported
1	Stone-curlew	Wildlife and Countryside Act 1981 (Schedule 1) NERC ACT 2006. Section 41: Species of Principal Importance in England	Landbeach (TL4764)	2012
2	Mediterranean gull	Wildlife and Countryside Act 1981 (Schedule 1)	Milton landfill site (TL4663)	2019
	Bullfinch	NERC ACT 2006. Section 41: Species of Principal Importance in England	Mere Way, Milton (TL4663)	2019
	Lesser redpoll	NERC ACT 2006. Section 41: Species of Principal Importance in England	Milton (TL4663)	2019
	Turtle dove	NERC ACT 2006. Section 41: Species of Principal Importance in England	Milton (TL4663)	2019
	Yellow wagtail	NERC ACT 2006. Section 41: Species of Principal Importance in England	Milton (TL4663)	2019
	Grey partridge	NERC ACT 2006. Section 41: Species of Principal Importance in England	Milton (TL4663)	2019
	Curlew	NERC ACT 2006. Section 41: Species of Principal Importance in England	Milton (TL4663)	2019
3	Barn owl	Wildlife and Countryside Act 1981 (Schedule 1)	Low Fen Drove Way Grasslands and Hedges CWS	2011

Table H.103: Historical Natural England bat EPSM licence applications within 5km¹³⁰ of the proposed site areas

Site area	Case reference	Species	Location	Approximate distance (km)	Details	Start date	End date
1	EPSM2010-2402	Common pipistrelle Soprano pipistrelle	TL483615	3.7	Allowed destruction of a resting place	18/10/2010	30/09/2011
	EPSM2012-4691	Brown long-eared bat Noctule bat Common pipistrelle Soprano pipistrelle	TL483615	3.7	Allowed destruction of a resting place	16/05/2013	31/03/2015
	2014-775-EPS-MIT	Brown long-eared bat Noctule bat Common pipistrelle Soprano pipistrelle	TL480629	2.9	Allowed destruction of a resting place	01/01/2001	01/01/2001
2	EPSM2010-2402	Common pipistrelle Soprano pipistrelle	TL483615	2	Allowed destruction of a resting place	18/10/2010	30/09/2011
	EPSM2012-4691	Brown long-eared bat Noctule bat Common pipistrelle Soprano pipistrelle	TL483615	2	Allowed destruction of a resting place	16/05/2013	31/03/2015
	2014-775-EPS-MIT	Brown long-eared bat Noctule bat Common pipistrelle	TL482629	1.8	Allowed destruction of a resting place	01/01/2001	01/01/2001

¹³⁰ Excluding EPSM licences south and west of Cambridge conurbation and south of Cambridge airport due to the distance and lack of habitat connectivity because of the existing built up areas.

		Soprano pipistrelle					
3	2014-775-EPS-MIT	Brown long-eared bat	TL482629	1.6	Allowed destruction of a resting place	01/01/2001	01/01/2001
		Noctule bat					
		Common pipistrelle					
		Soprano pipistrelle					
	EPSM2012-4691	Brown long-eared bat	TL483615	0.8	Allowed destruction of a resting place	16/05/2013	31/03/2015
		Noctule bat					
		Common pipistrelle					
		Soprano pipistrelle					
	EPSM2010-2402	Common pipistrelle	TL483615	0.8	Allowed destruction of a resting place	18/10/2010	30/09/2011
		Soprano pipistrelle					
	2017-28568-EPS-MIT	Brown long-eared bat	TL532630	3.3	Allowed destruction and damage of a resting place	25/04/2017	30/04/2027
		Common pipistrelle					
		Natterer's bat					