



High Speed Two Phase 2a (West Midlands - Crewe)

Background Information and Data

Ecology and biodiversity

Ecological baseline data - hedgerows (BID-EC-005-000)



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Department for Transport

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High Speed Two (HS2) Limited,
Two Snowhill
Snow Hill Queensway
Birmingham B4 6GA

Telephone: 08081 434 434

General email enquiries: HS2enquiries@hs2.org.uk

Website: www.gov.uk/hs2

A report prepared for High Speed Two (HS2) Limited:

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1 Introduction

1.1.1 This report presents a summary of the ecological baseline data relating to hedgerows.

1.1.2 Ecological baseline data has been collected for the assessment of High Speed Rail (West midlands – Crewe). The Proposed Scheme will pass through the following community areas (CA):

- CA1: Fradley to Colton;
- CA2: Colwich to Yarlet;
- CA3: Stone and Swynnerton;
- CA4: Whitmore Heath to Madeley; and
- CA5: South Cheshire.

1.1.3 This report should be read in conjunction with Map Series EC-10 in the Background Information and Data, Ecology Map Books.

1.1.4 The following baseline ecology reports can also be referred to:

- Ecological baseline data - phase 1 habitat survey (Background Information and Data: BID-EC-002-000);
- Ecological baseline data - protected and or notable flora (Background Information and Data: BID-EC-003-000);
- Ecological baseline data - national vegetation classification and ancient woodland (Background Information and Data: BID-EC-004-000);
- Ecological baseline data - river habitat, river corridor, and ditch surveys, (Background Information and Data: BID-EC-006-000);
- Ecological baseline data - amphibian and pond surveys (Background Information and Data: BID-EC-007-000);
- Ecological baseline data – reptiles (Background Information and Data: BID-EC-8-000);
- Ecological baseline data – breeding and wintering birds (Background Information and Data: BID-EC-009-000);
- Ecological baseline data - otter and water vole (Background Information and Data: BID-EC-010-000);
- Ecological baseline data - hazel dormouse (Background Information and Data: BID-EC-011-000);
- Ecological baseline data – bats (Background Information and Data: BID-EC-12-000);

- Ecological baseline data - white clawed crayfish and other invertebrate (Background Information and Data: BID-EC-013-000); and
- Ecological baseline data – fish (Background Information and Data: BID-EC-014-000).

1.1.5 Note that baseline data for badger is not made publically available due to the historic persecution of this species.

1.1.6 The ecological assessment is detailed in The High Speed Rail (West Midlands - Crewe) Environmental Statement (ES)¹ :

- Volume 2, Community area reports;
- Volume 3, Route-wide effects;
- Volume 4, Off-route effects; and
- Volume 5, Appendices.

¹ HS2 Ltd (2017), *High Speed Rail (West Midlands – Crewe) Environmental Statement (ES)*, www.gov.uk/hs2

2 Hedgerows

2.1 Methodology

2.1.1 Details of the standard methodology utilised for hedgerow surveys are provided in Technical Note HS2 Ecological Surveys: Field Survey Methods and Standards (FSMS) included in the Scope and Methodology Report (SMR) Addendum².

2.1.2 Details of the locations where hedgerow survey were conducted are provided in Table 1 and in the accompanying Ecology Map Series EC-10. Sites for hedgerow survey were identified as those that are within 100m of the land required for the construction of the Proposed Scheme. Information on designated sites for which hedgerows are the primary feature of interest were obtained from the following sources:

- Staffordshire Ecological Records Centre³; and
- rECOrd⁴ for Cheshire area.

2.2 Deviations, constraints and limitations.

2.2.1 All hedgerows within and up to 100m from the Proposed Scheme were identified from aerial photography and were then scoped and surveyed in the field.

2.2.2 Hedgerow surveys can be undertaken at any time of year but the optimal period is April to October (Defra, 2007⁵). Approximately 20% of surveys were undertaken outside this optimal period. This may have led to an under recording of ground flora at some sites but overall this is unlikely to have detracted from the reliability of the results, as the majority of hedgerows were found in intensively farmed or improved grassland areas.

2.2.3 A number of hedgerows were not surveyed due to lack of land access. The likely classification of the hedgerows within these land parcels is detailed in Table 1.

Table 1: Summary of hedgerows where no access was available for survey within the West Midlands to Crewe area

Site name and location	Likely Classification	Distance from the Proposed Scheme	CA
Areas between Hanch and King's Bromley Wharf marina	Contains 18 hedgerows. These hedgerows are likely to be of ecological value and classified as 'important' under the Hedgerow Regulations 1997 ⁶	Within Proposed Scheme	CA1

² Environmental Impact Assessment Scope and Methodology Report Addendum, Volume 5: Appendix CT-001-002

³ Staffordshire Ecological Record, The Ecological Database for Staffordshire, http://www.staffs-ecology.org.uk/html2015/index.php?title=Main_Page

⁴ rECOrd, Local Biological Records Centre serving Cheshire, <http://www.record-lrc.co.uk/>

⁵ Department for Environment, Food and Rural Affairs (2007), Hedgerow Survey Handbook: A standard procedure for local surveys in the UK, 2nd edition, Defra, London

⁶ The Hedgerows Regulations, SI 1197 No. 1160. Her Majesty's Stationery Office, London

Site name and location	Likely Classification	Distance from the Proposed Scheme	CA
Areas between King's Bromley Wharf marina and north of A513 Alrewas Road	Contains 20 hedgerows. These hedgerows are likely to be of ecological value and classified as 'important' under the Hedgerow Regulations 1997	Within Proposed Scheme	CA1
Areas north of Rugeley Power Station to land east of Colton	Contains 28 hedgerows. These hedgerows are likely to be of ecological value and classified as 'important' under the Hedgerow Regulations 1997	Within Proposed Scheme	CA1
Areas between Marston and Yarlet, north of Yarlet Lane	Contains 13 hedgerows. These hedgerows are likely to be of ecological value and classified as 'important' under the Hedgerow Regulations 1997	Within Proposed Scheme	CA2
Land north-east of Pire Hill, west of M6 motorway	Contains 16 hedgerows. These hedgerows are likely to be of ecological value and classified as 'important' in accordance with The Hedgerows Regulations 1997	Within Proposed Scheme	CA3

2.2.4 Hedgerows that are 'important'⁷ because they qualify with The Hedgerows Regulations 1997 'Wildlife and Landscape' criteria are identified in Table 2.

⁷ Hedgerow which meets the necessary criteria defined in the Hedgerow Regulations (1997). Note the current assessment only takes into consideration the wildlife and landscape criteria, as archaeological and historical value does not form part of the scope of the ecological assessment

2.3 Baseline

Fradley to Colton (CA1)

- 2.3.1 Within this area a total of 336 hedgerows with a combined length of approximately 51.9km were surveyed (within 100m of the land required for the construction of the Proposed Scheme) to determine whether they meet the wildlife and landscape criteria to be considered an 'important' hedgerow under the Hedgerow Regulations. Of those, 112 qualified as 'important' hedgerows (with a combined length of approximately 22.8km) and are detailed in Table 2. In total 88 of those 'important' hedgerows (with a combined length of approximately 13km) are located within the land required for the construction of the Proposed Scheme.
- 2.3.2 The majority of the important hedgerows qualified under criterion six (see Table 2 for descriptions of criteria) which is that the hedgerow is adjacent to a bridleway or footpath, a road used as a public path, a byway open to all traffic and includes at least four woody species and a least two of the features specified such as a ditch, bank or mature trees. In addition there are 52 hedgerows which qualify under criterion three, which is that the hedgerow contains at least seven woody species (from Schedule 3) of the Hedgerows Regulations. In total 25 hedgerows qualify under criterion four, which is that the hedgerow contains at least six woody species (from Schedule 3) and at least three of the following features identified in Schedule 1 Part II paragraph 7 sub-paragraph 4 of the Hedgerows Regulations. Also in total, 25 hedgerows qualify under criteria seven, which is that the hedgerow contains at least five woody species and at least four of the features specified under criterion four.
- 2.3.3 The most common woody species found within these hedgerows were field maple, hazel, hawthorn, ash, holly, blackthorn, pedunculate oak, rose and elder.
- 2.3.4 There are ten hedgerows which are listed because the hedgerows themselves are notified as LWSs (Local Wildlife Sites) and BASs (Biodiversity Alert Sites) and are therefore the primary feature of interest in CA1. They are located within 250m of land required for the construction of the Proposed Scheme:
- Curborough House Hedgerows LWS;
 - Pipe Wood Lane LWS;
 - Newlands Lane LWS;
 - Sheracop Lane LWS;
 - Crawley Lane BAS;
 - Pipe Wood Lane BAS;
 - Long Mets Lane BAS;
 - Finners Hill BAS;
 - Moor Lane BAS; and
 - Sheracop Lane BAS.

Colwich to Yarlet (CA2)

- 2.3.5 Within this area a total of 261 hedgerows (with a combined length of approximately 31.8km) were surveyed (within 100m of the land required for the construction of the Proposed Scheme) to determine whether they meet the wildlife and landscape criteria to be considered an 'important' hedgerow under the Hedgerow Regulations. Of those, 18 qualified as 'important' hedgerows (with a combined length of approximately 2.5km) and are detailed in Table 2. In total 14 of those 'important' hedgerows (with a combined length of approximately 1.4km) are located within the land required for the construction of the Proposed Scheme.
- 2.3.6 The majority of the important hedgerows qualified under criterion six (see Table 2 for descriptions of criteria) which is that the hedgerow is adjacent to a bridleway or footpath, a road used as a public path, a byway open to all traffic and includes at least four woody species and a least two of the features specified such as a ditch, bank or mature trees. In addition there are four hedgerows which qualify under criterion three, which is that the hedgerow contains at least seven woody species (from Schedule 3) of the Hedgerows Regulations. Four hedgerows qualify under criterion four, which is that the hedgerow contains at least six woody species (from Schedule 3) and at least three of the following features identified in Schedule 1 Part II paragraph 7 sub-paragraph 4 of the Hedgerows Regulations. Two hedgerows qualify under criteria seven, which is that the hedgerow contains at least five woody species and at least four of the features specified under criterion four.
- 2.3.7 The most common woody species found within these hedgerows were field maple, hazel, hawthorn, ash, holly, blackthorn, pedunculate oak, rose and elder.
- 2.3.8 A hedgerow at Bishton Lane BAS is the primary reason that the site was selected as a BAS. The site is located within 250m of land required for the construction of the Proposed Scheme.

Stone and Swynnerton (CA3)

- 2.3.9 Within this area a total of 304 hedgerows (with a combined length of approximately 49.9km) were surveyed (within 100m of the land required for the construction of the Proposed Scheme) to determine whether they meet the wildlife and landscape criteria to be considered an 'important hedgerow' under the Hedgerow Regulations. Of those, 18 qualified as 'important' hedgerows (with a combined length of approximately 4km) and are detailed in Table 2. All 18 hedgerows (with a combined length of approximately 3.4km) are located within the land required for the construction of the Proposed Scheme.
- 2.3.10 The majority of the important hedgerows qualified under criterion six (see Table 2 for descriptions of criteria) which is that the hedgerow is adjacent to a bridleway or footpath, a road used as a public path, a byway open to all traffic and includes at least four woody species and a least two of the features specified such as a ditch, bank or mature trees. In addition there are four hedgerows which qualify under criterion three, which is that the hedgerow contains at least seven woody species (from Schedule 3) of the Hedgerows Regulations. Two hedgerows qualify under criterion four, which is that the hedgerow contains at least six woody species (from Schedule 3) and at least three

of the following features identified in Schedule 1 Part II paragraph 7 sub-paragraph 4 of the Hedgerows Regulations. Five hedgerows qualify under criteria seven, which is that the hedgerow contains at least five woody species and at least four of the features specified under criterion four.

- 2.3.11 The most common woody species found within these hedgerows were field maple, hazel, hawthorn, ash, holly, blackthorn, pedunculate oak, rose and elder.

Whitmore Heath to Madeley (CA4)

- 2.3.12 Within this area 238 hedgerows (with a combined length of approximately 27.9km) were surveyed (within 100m of the land required for the construction of the Proposed Scheme) to determine whether they meet the wildlife and landscape criteria to be considered an 'important' hedgerow under the Hedgerow Regulations. Of those 23 qualified as 'important' hedgerows (with a combined length of approximately 4.8km) and are detailed in Table 2. In total 21 of those 'important' hedgerows (with a combined length of approximately 3.8km) are located within the land required for the construction of the Proposed Scheme.

- 2.3.13 The majority of the important hedgerows qualified under criterion six (see Table 2 for descriptions of criteria) which is that the hedgerow is adjacent to a bridleway or footpath, a road used as a public path, a byway open to all traffic and includes at least four woody species and a least two of the features specified such as a ditch, bank or mature trees. There are two hedgerows which qualify as important hedgerows under criterion three, which is that the hedgerow contains at least seven woody species. In addition there are 11 hedgerows which qualify under criterion three, which is that the hedgerow contains at least seven woody species (from Schedule 3) of the Hedgerows Regulations. In total, 10 hedgerows qualify under criterion four, which is that the hedgerow contains at least six woody species (from Schedule 3) and at least three of the following features identified in Schedule 1 Part II paragraph 7 sub-paragraph 4 of the Hedgerows Regulations. Nine hedgerows qualify under criteria seven, which is that the hedgerow contains at least five woody species and at least four of the features specified under criterion four.

- 2.3.14 The most common woody species found within these hedgerows were field maple, hazel, hawthorn, ash, holly, blackthorn, pedunculate oak, rose and elder.

- 2.3.15 A hedgerow at Red Lane BAS is the primary reason that the site was selected as a BAS. The site is located within 250m of land required for the construction of the Proposed Scheme.

South Cheshire (CA5)

- 2.3.16 Within this area 130 hedgerows (with a combined length of approximately 19.4km) were surveyed (within 100m of the land required for the construction of the Proposed Scheme) to determine whether they meet the wildlife and landscape criteria to be considered an 'important' hedgerow under the Hedgerow Regulations. Of those 20 qualified as 'important' hedgerows (with a combined length of approximately 2.8km) and are detailed in Table 2. In total 13 of those 'important' hedgerows (with a combined length of approximately 1.8km) are located within the land required for the construction of the Proposed Scheme.

- 2.3.17 The majority of the important hedgerows qualified under criteria six (see Table 2 for descriptions of criteria), which is that the hedgerow is adjacent to a bridleway or footpath, a road used as a public path, a byway open to all traffic and includes at least four woody species and a least two of the features specified such as a ditch, bank or mature trees. In addition, six hedgerows which qualify under criterion three, which is that the hedgerow contains at least seven woody species (from Schedule 3) of the Hedgerows Regulations. Two hedgerows qualify under criterion four, which is that the hedgerow contains at least six woody species (from Schedule 3) and at least three of the following features identified in Schedule 1 Part II paragraph 7 sub-paragraph 4 of the Hedgerows Regulations. Six hedgerows qualify under criteria seven, which is that the hedgerow contains at least five woody species and at least four of the features specified under criterion four.
- 2.3.18 The most common woody species found within these hedgerows were field maple, hazel, hawthorn, ash, holly, blackthorn, pedunculate oak, rose and elder.

Table 2: Summary of hedgerows qualifying as 'important' within the West Midlands to Crewe area

Ecology survey code	Centroid OS grid reference	Survey date	Qualifying wildlife and landscape criteria*							CA	Within the land required for the construction of the Proposed Scheme (Yes/No)
			(1)	(2)	(3)	(4)	(5)	(6)	(7)		
000-HS1-188013	SK1304313815	18 August 2016	No	No	Yes	Yes	No	No	yes	CA1	Yes
000-HS1-190009	SK1187015071	08 September 2016	No	Unknown	No	No	No	Yes	No	CA1	Yes
000-HS1-190010	SK1217115241	01 September 2016	No	No	No	No	No	Yes	No	CA1	Yes
000-HS1-190014	SK1180915094	25 July 2016	No	Unknown	No	No	No	Yes	No	CA1	Yes
000-HS1-190021	SK1137014968	01 September 2016	No	No	No	No	No	Yes	No	CA1	Yes
000-HS1-190022	SK1198515792	01 September 2016	No	Unknown	No	No	No	Yes	No	CA1	Yes
000-HS1-190024	SK1216816172	01 September 2016	No	Unknown	No	No	No	Yes	No	CA1	Yes
000-HS1-192003	SK1074416789	17 November 2016	No	No	No	Yes	No	Yes	No	CA1	Yes
000-HS1-192010	SK1031116806	21 September 2016	No	No	Yes	Yes	No	No	No	CA1	Yes
000-HS1-193006	SK1036017525	13 July 2016	No	No	Yes	No	No	No	No	CA1	Yes

000-HS1-193016	SK1006117962	13 July 2016	No	Unknown	No	Yes	No	Yes	No	CA1	Yes
000-HS1-193019	SK0971517860	23 November 2016	No	No	No	No	No	Yes	No	CA1	Yes
000-HS1-193021	SK0994917973	23 November 2016	No	No	No	No	No	Yes	No	CA1	Yes
000-HS1-193027	SK0965318055	23 November 2016	No	No	No	No	No	Yes	No	CA1	No
000-HS1-193029	SK0952217863	16 August 016	No	Unknown	No	Yes	No	Yes	No	CA1	Yes
000-HS1-193033	SK0952517863	16 August 2016	No	No	No	No	No	Yes	No	CA1	Yes
000-HS1-194003	SK0932917971	13 July 2016	Unknown	Unknown	Yes	No	No	No	No	CA1	Yes
000-HS1-194007	SK0976518487	23 November 2016	No	No	No	No	No	Yes	Yes	CA1	Yes
000-HS1-194011	SK0934618012	13 July 2016	Unknown	Unknown	Yes	No	No	No	No	CA1	Yes
000-HS1-194013	SK0969318446	13 July 2016	No	No	Yes	No	No	No	No	CA1	Yes
000-HS1-194014	SK0951318470	11 August 2016	No	No	No	No	No	Yes	No	CA1	Yes
000-HS1-194017	SK0928818427	12 August 2016	No	Unknown	Yes	No	No	Yes	No	CA1	Yes
000-HS1-194019	SK0928818427	12 August 2016	No	No	Yes	No	No	Yes	No	CA1	Yes
000-HS1-194020	SK0908318682	10 August 2016	No	No	Yes	No	No	Yes	No	CA1	Yes

000-HS1-194021	SKo887318491	11 August 2016	No	No	Yes	Yes	No	Yes	Yes	CA1	Yes
000-HS1-194022	SKo887318491	11 August 2016	No	No	Yes	Yes	No	No	Yes	CA1	Yes
000-HS1-194023	SKo901618598	11 August 2016	No	No	Yes	Yes	No	No	Yes	CA1	Yes
000-HS1-194024	SKo887618477	20 December 2016	No	No	Yes	Yes	No	No	Yes	CA1	No
000-HS1-194025	SKo898018691	11 August 2016	No	No	Yes	Yes	Yes	Yes	Yes	CA1	Yes
000-HS1-194026	SKo895318515	11 August 2016	No	No	Yes	Yes	No	No	Yes	CA1	Yes
000-HS1-194027	SKo901718803	11 August 2016	No	No	Yes	Yes	No	No	No	CA1	No
000-HS1-195001	SKo881919148	10 August 2016	No	No	No	No	No	Yes	No	CA1	Yes
000-HS1-195002	SKo881919148	11 August 2016	No	No	No	No	No	Yes	No	CA1	Yes
000-HS1-195003	SKo882619124	11 August 2016	No	No	Yes	No	No	Yes	No	CA1	Yes
000-HS1-195004	SKo876318722	11 August 2016	No	No	Yes	No	No	Yes	No	CA1	Yes
000-HS1-195006	SKo882619124	11 August 2016	No	No	Yes	No	No	Yes	No	CA1	Yes
000-HS1-195007	SKo882619124	11 August 2016	No	Unknown	Yes	No	No	Yes	No	CA1	Yes
000-HS1-195009	SKo860718886	16 June 2016	No	No	Yes	No	No	No	No	CA1	Yes

000-HS1-195011	SK0840519375	15 June 2016	No	No	No	No	No	Yes	No	CA1	Yes
000-HS1-195012	SK0783218990	15 June 2016	No	Unknown	No	No	No	Yes	No	CA1	Yes
000-HS1-196001	SK0809119257	16 June 2016	No	Unknown	Yes	No	No	No	No	CA1	Yes
000-HS1-196003	SK0804119412	16 June 2016	No	No	Yes	Yes	No	No	No	CA1	Yes
000-HS1-196004	SK0773118734	15 June 2016	No	No	Yes	No	No	Yes	No	CA1	Yes
000-HS1-196008	SK0825219584	16 June 2016	No	Unknown	Yes	Yes	No	No	No	CA1	Yes
000-HS1-196010	SK0817819737	30 November 2016	No	No	No	No	No	No	Yes	CA1	Yes
000-HS1-196021	SK0782320201	12 July 2016	No	Yes	No	No	No	Yes	No	CA1	No
000-HS1-196022	SK0783720239	12 July 2016	No	No	No	Yes	No	No	Yes	CA1	No
000-HS1-196023	SK0783620240	13 July 2016	Unknown	Unknown	No	No	No	Yes	No	CA1	No
000-HS1-196027	SK0766620370	16 November 2016	No	No	Yes	No	No	No	No	CA1	Yes
000-HS1-196028	SK0771620252	26 October 2016	No	No	yes	No	No	No	No	CA1	Yes
000-HS1-196033	SK0766620370	26 October 2016	No	No	Yes	No	No	No	No	CA1	Yes
000-HS1-197001	SK0759720282	13 July 2016	No	Unknown	No	Yes	No	Yes	No	CA1	Yes

000-HS1-197003	SK0740320182	13 July 2016	No	Unknown	No	Yes	No	No	yes	CA1	Yes
000-HS1-197007	SK0742620277	13 July 2016	No	Unknown	No	Yes	No	Yes	No	CA1	Yes
000-HS1-197009	SK0735620281	16 November 2016	No	No	Yes	No	No	Yes	No	CA1	Yes
000-HS1-197011	SK0714919980	10 October 2016	No	No	No	No	No	Yes	No	CA1	Yes
000-HS1-197014	SK0724320263	10 October 2016	No	No	No	No	No	Yes	No	CA1	Yes
000-HS1-197020	SK0711320146	07 September 2016	No	No	Yes	No	No	No	No	CA1	Yes
000-HS1-197022	SK0743920415	16 November 2016	No	No	Yes	No	No	No	No	CA1	Yes
000-HS1-197023	SK0734520385	07 September 2016	No	Unknown	Yes	No	No	No	No	CA1	Yes
000-HS1-197024	SK0720520397	10 October 2016	No	No	No	No	No	Yes	No	CA1	Yes
000-HS1-197025	SK0718320351	10 November 2016	No	No	No	No	No	Yes	Yes	CA1	Yes
000-HS1-197026	SK0708320256	10 November 2016	No	No	No	No	No	Yes	No	CA1	Yes
000-HS1-197030	SK0717320291	12 August 2016	No	Unknown	No	No	No	Yes	no	CA1	Yes
000-HS1-197032	SK0689820216	10 November 2016	No	No	No	No	No	Yes	No	CA1	Yes
000-HS1-197039	SK0672020208	10 November 2016	No	No	No	No	No	Yes	Yes	CA1	Yes

000-HS1-197050	SK0694020730	28 August 2016	No	Unknown	No	No	No	Yes	No	CA1	Yes
000-HS1-197053	SK0686920454	10 November 2016	No	No	No	No	No	Yes	No	CA1	Yes
000-HS1-197057	SK0696320892	26 August 2016	No	Unknown	No	No	No	Yes	No	CA1	Yes
000-HS1-197059	SK0686820771	26 August 2016	No	Unknown	No	No	No	Yes	No	CA1	Yes
000-HS1-197061	SK0633820685	26 August 2016	No	No	No	No	No	Yes	No	CA1	Yes
000-HS1-197066	SK0679020946	22 June 2016	No	No	Yes	No	No	No	No	CA1	Yes
000-HS1-197067	SK0679020946	22 June 2016	No	Unknown	Yes	No	No	No	No	CA1	Yes
000-HS1-197068	SK0669020638	22 June 2016	No	Unknown	Yes	No	No	No	No	CA1	Yes
000-HS1-197069	SK0669020638	22 June 2016	No	No	Yes	No	No	No	No	CA1	Yes
000-HS1-198001	SK0687820767	22 June 2016	No	No	Yes	No	No	No	No	CA1	Yes
000-HS1-198020	SK0564320429	26 October 2016	No	No	No	No	No	Yes	No	CA1	No
000-HS1-198022	SK0587721086	17 June 2016	No	Unknown	Yes	No	No	Yes	No	CA1	Yes
000-HS1-199002	SK0587721086	19 January 2017	No	No	No	No	No	Yes	No	CA1	No
000-HS1-199003	SK0560321139	18 October 2016	No	No	Yes	No	No	Yes	No	CA1	No

000-HS1-199005	SK0570521152	19 January 2017	No	No	No	No	No	Yes	No	CA1	Yes
000-HS1-199009	SK0566221252	18 October 2016	No	No	No	No	No	Yes	No	CA1	Yes
000-HS1-199012	SK0567721529	19 August 2016	No	Unknown	No	No	No	Yes	No	CA1	No
000-HS1-199013	SK0566521557	19 August 2016	No	Unknown	No	No	No	Yes	No	CA1	No
000-HS1-199015	SK0562621423	04 August 2016	No	No	No	No	No	Yes	No	CA1	Yes
000-HS1-199016	SK0567621429	04 August 2016	No	No	No	No	No	No	Yes	CA1	Yes
000-HS1-199017	SK0564521473	19 August 2016	No	No	No	No	No	Yes	No	CA1	Yes
000-HS1-199021	SK0564621662	04 August 2016	No	Unknown	No	No	No	Yes	No	CA1	No
000-HS1-199022	SK0553821851	15 July 2016	No	Unknown	Yes	No	No	No	No	CA1	No
000-HS1-199028	SK0547221405	12 July 2016	No	Unknown	Yes	No	No	Yes	No	CA1	Yes
000-HS1-199032	SK0545621326	12 July 2016	No	Unknown	Yes	No	No	No	No	CA1	Yes
000-HS1-199034	SK0508821438	23 June 2016	No	Unknown	Yes	Yes	No	Yes	Yes	CA1	Yes
000-HS1-200004	SK0496622506	11 July 2016	No	Unknown	Yes	Yes	No	Yes	Yes	CA1	Yes
000-HS1-200006	SK0490522223	15 July 2016	No	Unknown	Yes	No	No	No	No	CA1	No

000-HS1-200007	SK0473021908	15 July 2016	No	No	Yes	No	No	No	No	CA1	Yes
000-HS1-200011	SK0447321617	19 July 2016	No	Unknown	No	No	No	Yes	No	CA1	Yes
000-HS1-200015	SK0450121628	19 July 2016	No	Unknown	No	No	No	Yes	No	CA1	Yes
000-HS1-200022	SK0475422371	21 June 2016	No	Unknown	Yes	No	No	No	No	CA1	No
000-HS1-200030	SK0435721787	19 October 2016	No	No	No	No	No	Yes	No	CA1	Yes
000-HS1-200040	SK0485022924	09 August 2016	No	Unknown	No	No	No	Yes	No	CA1	No
000-HS1-200044	SK0444121896	21 June 2016	No	No	Yes	No	No	No	No	CA1	Yes
000-HS1-200050	SK0420421941	21 June 2016	No	Unknown	Yes	No	No	No	No	CA1	Yes
000-HS1-200054	SK0408322043	21 June 2016	No	Unknown	No	Yes	No	Yes	No	CA1	Yes
000-HS1-201001	SK0397222136	26 July 2016	No	Unknown	No	No	No	Yes	No	CA1	Yes
000-HS1-201003	SK0376021548	15 November 2016	No	No	No	No	No	Yes	No	CA1	No
000-HS1-201005	SK0375921550	13 October 2016	No	Unknown	No	No	No	Yes	Yes	CA1	No
000-HS1-201006	SK0379821645	15 November 2016	No	No	No	No	No	Yes	No	CA1	No
000-HS1-201008	SK0396322138	13 October 2016	No	No	No	Yes	No	Yes	Yes	CA1	Yes

000-HS1-201011	SK0366021677	15 November 2016	No	No	No	No	No	Yes	No	CA1	No
000-HS1-201013	SK0375221551	13 October 2016	No	Unknown	No	Yes	No	Yes	Yes	CA1	No
000-HS1-201016	SK0361621740	15 November 2016	No	No	No	No	No	yes	No	CA1	No
000-HS1-202002	SK0270722773	19 December 2016	No	No	No	No	No	Yes	No	CA2	Yes
000-HS1-203001	SK0199822737	15 August 2016	No	No	No	No	No	Yes	No	CA2	Yes
000-HS1-203004	SK0211923135	15 August 2016	No	Unknown	No	No	No	Yes	No	CA2	No
000-HS1-203010	SK0182523269	14 August 2016	No	Unknown	Yes	Yes	No	No	No	CA2	Yes
000-HS1-203014	SK0166123013	14 July 2016	No	No	No	No	No	Yes	No	CA2	Yes
000-HS1-204003	SK0061323680	15 July 2016	No	No	No	Yes	No	No	No	CA2	Yes
000-HS1-204004	SK0031023430	15 July 2016	No	Unknown	No	Yes	No	No	No	CA2	Yes
000-HS1-205005	SK0005323735	30 August 2016	No	Unknown	Yes	No	No	Unknown	No	CA2	Yes
000-HS1-205010	SK0007423743	15 July 2016	No	Unknown	No	No	No	Yes	No	CA2	Yes
000-HS1-205022	SK0001024364	25 August 2016	No	Unknown	No	No	No	Yes	No	CA2	No
000-HS1-205029	SJ9976424180	25 August 2016	No	Unknown	No	No	No	No	yes	CA2	No

000-HS1-211026	SJ9398526156	03 August 2016	No	Unknown	Yes	Yes	No	No	No	CA2	Yes
000-HS1-211030	SJ9402326138	03 August 2016	No	Unknown	Yes	No	No	No	No	CA2	Yes
000-HS1-212021	SJ9366626780	06 October 2016	No	Unknown	No	No	No	Yes	No	CA2	Yes
000-HS1-213003	SJ9331926941	08 February 2016	No	Unknown	No	No	No	Yes	No	CA2	Yes
000-HS1-213015	SJ9247327602	10 October 2016	No	Unknown	No	No	No	Yes	No	CA2	Yes
000-HS1-214002	SJ9239827596	10 October 2016	No	Unknown	No	No	No	No	Yes	CA2	Yes
000-HS1-214010	SJ9217727536	06 October 2016	No	Unknown	No	No	No	Yes	No	CA2	Yes
000-HS1-218011	SJ8952130820	24 October 2016	No	No	No	No	No	Yes	No	CA3	Yes
000-HS1-218018	SJ8958830987	24 October 2016	No	No	No	No	No	Yes	No	CA3	Yes
000-HS1-218019	SJ8966631185	24 October 2016	No	No	No	No	No	Yes	No	CA3	Yes
000-HS1-220005	SJ8846833222	09 August 2016	No	Unknown	No	No	No	No	yes	CA3	Yes
000-HS1-221006	SJ8826733422	09 August 2016	No	Unknown	Yes	No	No	No	No	CA3	Yes
000-HS1-221017	SJ8853433834	10 August 2016	No	Unknown	Yes	No	No	No	No	CA3	Yes
000-HS1-221018	SJ8822133783	08 August 2016	No	Unknown	No	No	No	Yes	No	CA3	Yes

000-HS1-221019	SJ8823533773	10 August 2016	No	Unknown	Yes	No	No	No	No	CA3	Yes
000-HS1-221022	SJ8808633866	08 August 2016	No	Unknown	No	No	No	No	Yes	CA3	Yes
000-HS1-221023	SJ8760333412	26 July 2016	No	Unknown	No	No	No	No	yes	CA3	Yes
000-HS1-221029	SJ8715333418	12 July 2016	No	No	Yes	Yes	No	No	Yes	CA3	Yes
000-HS1-221032	SJ8795633818	08 August 2016	No	Unknown	No	No	No	Yes	No	CA3	Yes
000-HS1-221033	SJ8768333912	08 August 2016	No	Unknown	No	No	No	Yes	No	CA3	Yes
000-HS1-222002	SJ8735933718	12 July 2016	No	Unknown	No	No	No	No	yes	CA3	Yes
000-HS1-224018	SJ8551336078	04 August 2016	No	Unknown	No	No	No	Yes	No	CA3	Yes
000-HS1-225003	SJ8540235993	04 August 2016	No	Unknown	No	Yes	No	No	No	CA3	Yes
000-HS1-227001	SJ8316537921	08 January 2016	No	No	No	No	No	Yes	No	CA3	Yes
000-HS1-228001	SJ8327038254	08 January 2016	No	No	No	No	No	Yes	No	CA3	Yes
000-HS1-230007	SJ8161439716	09 August 2016	No	No	No	No	No	Yes	No	CA4	Yes
000-HS1-230009	SJ8138539669	09 August 2016	No	Unknown	No	No	No	Yes	No	CA4	Yes
000-HS1-230014	SJ8137039867	09 August 2016	No	Unknown	yes	No	No	No	No	CA4	Yes

000-HS1-230015	SJ8146039966	09 August 2016	No	Unknown	Yes	No	No	No	No	CA4	No
000-HS1-230016	SJ8125839800	09 August 2016	No	No	Yes	No	No	Yes	No	CA4	Yes
000-HS1-230019	SJ8117540019	09 August 2016	Unknown	Unknown	No	Yes	No	Yes	No	CA4	Yes
000-HS1-230021	SJ8113540118	09 August 2016	Unknown	Unknown	No	Yes	No	Yes	No	CA4	Yes
000-HS1-231002	SJ8105740354	09 August 2016	No	Unknown	Yes	No	No	Yes	No	CA4	Yes
000-HS1-232012	SJ7986041481	11 July 2016	No	Unknown	No	No	No	Yes	Yes	CA4	No
000-HS1-233002	SJ7964941445	11 July 2016	No	Unknown	No	No	No	Yes	Yes	CA4	Yes
000-HS1-233004	SJ7918041413	20 December 2016	No	No	No	No	No	Yes	No	CA4	Yes
000-HS1-233010	SJ7934842266	02 December 2016	No	Unknown	Yes	Yes	No	No	Yes	CA4	Yes
000-HS1-233011	SJ7891741734	20 December 2016	No	No	No	No	No	Yes	No	CA4	Yes
000-HS1-233012	SJ7940842448	02 December 2016	No	No	yes	yes	no	No	yes	CA4	Yes
000-HS1-234004	SJ7867142106	20 December 2016	No	Unknown	No	Yes	No	No	No	CA4	Yes
000-HS1-235014	SJ7732843266	22 December 2016	No	No	No	Yes	No	Yes	No	CA4	Yes
000-HS1-236017	SJ7688743803	22 July 2016	No	Unknown	No	No	No	Yes	Yes	CA4	Yes

000-HS1-236021	SJ7702244079	02 December 2016	No	No	Yes	No	No	Yes	No	CA4	Yes
000-HS1-236023	SJ7651443796	15 July 2016	No	No	Yes	Yes	No	Yes	Yes	CA4	Yes
000-HS1-236026	SJ7660443956	22 July 2016	No	Unknown	No	No	No	Yes	No	CA4	Yes
000-HS1-237016	SJ7650744665	15 July 2016	No	No	Yes	Yes	No	Yes	Yes	CA4	Yes
000-HS1-238002	SJ7557545122	15 August 2016	No	No	Yes	Yes	No	No	Yes	CA4	Yes
000-HS1-238004	SJ7531445025	15 August 2016	No	Unknown	Yes	Yes	No	Unknown	Yes	CA4	Yes
000-HS1-240005	SJ7435646258	11 July 2016	No	Unknown	No	No	No	Yes	No	CA5	Yes
000-HS1-240032	SJ7422347033	17 August 2016	No	No	Yes	No	No	No	No	CA5	Yes
000-HS1-243012	SJ7252949779	19 October 2016	No	No	Yes	No	No	No	No	CA5	Yes
000-HS1-244006	SJ7290550066	15 July 2016	No	Unknown	Yes	Yes	No	Yes	Yes	CA5	Yes
000-HS1-244008	SJ7236850088	05 December 2016	No	Unknown	No	No	No	Yes	Yes	CA5	No
000-HS1-244009	SJ7279750289	15 July 2016	No	Unknown	No	No	No	Yes	No	CA5	Yes
000-HS1-244015	SJ7180850810	13 September 2016	No	Unknown	No	No	No	No	No	CA5	No
000-HS1-245037	SJ7178751286	21 November 2016	No	Unknown	No	No	No	Yes	No	CA5	Yes

000-HS1-246001	SJ7211651875	24 November 2016	No	Unknown	Yes	No	No	No	No	CA5	Yes
000-HS1-246011	SJ7218252039	24 November 2016	No	No	No	No	No	Yes	No	CA5	Yes
000-HS1-246024	SJ7206252260	30 September 2016	No	Unknown	No	No	No	Yes	No	CA5	Yes
000-HS1-246030	SJ7212752381	30 September 2016	No	Unknown	No	No	No	Yes	No	CA5	No
000-HS1-246052	SJ7107252452	15 September 2016	No	No	No	No	No	No	Yes	CA5	Yes
000-HS1-246053	SJ7141852476	15 July 2016	No	No	No	No	No	No	Yes	CA5	Yes
000-HS1-247002	SJ7212252924	18 October 2016	No	Unknown	Yes	Yes	No	No	No	CA5	No
000-HS1-247006	SJ7112952481	15 September 2016	No	No	No	No	No	No	Yes	CA5	Yes
000-HS1-247008	SJ7138852675	14 July 2016	No	Unknown	No	No	No	Yes	No	CA5	No
000-HS1-247012	SJ7131152588	11 August 2016	No	Unknown	Yes	No	No	No	No	CA5	Yes
000-HS1-247013	SJ7125752429	15 July 2016	No	Unknown	No	No	No	No	Yes	CA5	Yes
000-HS1-247018	SJ7066852778	14 July 2016	No	Unknown	No	No	No	Yes	No	CA5	No

* Key to wildlife and landscape criteria used in Table 2

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1. Hedgerow is obviously less than 30 years in age;
 2. Hedgerow contains species listed on either:
 - Part 1 of Schedule 1 of the Wildlife and Countryside Act (1981 as amended);
 - Schedule 5 of the Wildlife and Countryside Act (1981 as amended);
 - Schedule 8 of the Wildlife and Countryside Act (1981 as amended).
 - or categorised as either:
 - a declining breeder (category 3) in 'Red Data Birds in Britain';
 - 'endangered', 'extinct', 'rare' or 'vulnerable' in Britain in British Red Data Books for vascular plants ; insects ; and invertebrates other than insects .
 3. Hedgerow contains at least seven woody species (from schedule 3);
 4. Hedgerow contains at least six woody species (from schedule 3) and at least three of the following features identified in Schedule 1 Part II paragraph 7 sub-paragraph 4 of the Hedgerow Regulations, namely;
 - a bank or wall which supports the hedgerow along at least one half of its length;
 - gaps which in aggregate do not exceed 10% of the length of the hedgerow;
 - where the length of the hedgerow does not exceed 50m, at least one standard;
 - where the length of the hedgerow exceeds 50 metres but does not exceed 100m, at least 2 standard;
 - where the length of the hedgerow exceeds 100 metres, such number of standard (within any part of its length) as would when averaged over its total length amount to at least one for each 50m ;
 - at least three woodland species within 1m, in any direction, of the outermost edges of the hedgerow;
 - a ditch along at least one half of the length of the hedgerow;
 - connections scoring four points or more - connection with another hedgerow scores one point and a connection with a pond or a woodland in which the majority of trees are broad-leaved trees scores two points; and a hedgerow is connected with something not only if it meets it but also if it has a point within 10m of it and would meet it if the line of the hedgerow continued;
 - a parallel hedge within 15m of the hedgerow.
 5. Hedgerow contains at least six woody species (from schedule 3), including one of the following:
 - black-poplar tree (*Populus nigra ssp betulifolia*);
 - large-leaved lime (*Tilia platyphyllos*);
 - small-leaved lime (*Tilia cordata*);
 - wild service-tree (*Sorbus torminalis*);
 - hedgerow containing at least five woody species and at least four of the features specified under (4) above; and
 - hedgerow is adjacent to a bridleway or footpath, a road used as a public path, a byway open to all traffic and includes at least four woody species (from schedule 3) and a least two of the features specified under (4) above.
 6. Hedgerow is adjacent to a bridleway or footpath, a road used as a public path, a byway open to all traffic and includes at least four woody species and a least two of the features specified under (4) above; and
 7. Hedgerow containing at least five woody species and at least four of the features specified under (4) above.
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3 References


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High Speed Two (HS2) Limited
Two Snowhill
Snow Hill Queensway
Birmingham B4 6GA

08081 434 434
HS2Enquiries@hs2.org.uk