

# High Speed Rail (Crewe – Manchester) Environmental Statement

## Volume 5: Appendix EC-015-0MA03

### **Ecology and biodiversity**

MA03: Pickmere to Agden and Hulseheath  
Ecological register of local level effects

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## Department for Transport

High Speed Two (HS2) Limited has been tasked by the Department for Transport (DfT) with managing the delivery of a new national high speed rail network. It is a non-departmental public body wholly owned by the DfT.

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# 1 Introduction

- 1.1.1 This report is an appendix to the ecological assessment.
- 1.1.2 Table 1 provides a summary of the anticipated local/parish level adverse effects on ecological receptors arising from the construction and operation of the HS2 Phase 2b Proposed Scheme in the Pickmere to Agden and Hulseheath area (MA03).
- 1.1.3 This appendix should be read in conjunction with:
- Volume 2, Community Area (CA) reports;
  - Volume 3, Route-wide effects;
  - Volume 4, Off-route effects; and
  - Volume 5, Appendices.
- 1.1.4 See Volume 5, Appendix EC-001-00001 and the Ecology and Biodiversity Map Book (Map Series EC-01), for ecological designated sites, and Appendices EC-016-00001 to EC-016-00007 and EC-016-00009 for documents to inform Habitats Regulations Assessment screening and Appropriate Assessment.
- 1.1.5 In addition, the baseline data used for the ecological assessment is set out in Background Information and Data (BID) reports<sup>1</sup>, (see BID EC-002-00001 to BID EC-013-001) and the BID Ecology Map Books<sup>2</sup> (Map Series EC-02 and EC-04 to EC-12) showing habitats and species relevant to the Proposed Scheme. The full list of ecological BID reports is as follows:
- Ecological baseline data – Phase 1 Habitat Survey (BID EC-002-00001);
  - Ecological baseline data – protected and notable flora (BID EC-003-00001);
  - Ecological baseline data – National Vegetation Classification and ancient woodland (BID EC-004-00001);
  - Ecological baseline data – hedgerows (BID EC-005-00001);
  - Ecological baseline data – river habitat, river macrophyte, and ditch surveys (BID EC-006-00001);
  - Ecological baseline data – amphibian and pond and canal surveys (BID EC-007-00001);
  - Ecological baseline data – reptiles (BID EC-008-00001);
  - Ecological baseline data – breeding and wintering birds (BID EC-009-00001);
  - Ecological baseline data – otter and water vole (BID EC-010-00001);

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<sup>1</sup> High Speed Two Ltd (2022), High Speed Rail (Crewe – Manchester), *Background Information and Data*, BID EC-002-00001 to BID EC-013-00001. Available online at: <https://www.gov.uk/government/collections/hs2-phase-2b-crewe-manchester-environmental-statement>.

<sup>2</sup> High Speed Two Ltd (2022), High Speed Rail (Crewe – Manchester), *Background information and Data, Ecology Map Book: Map Series EC-02 and EC-04 to EC-12*. Available online at: <https://www.gov.uk/government/collections/hs2-phase-2b-crewe-manchester-environmental-statement>.

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- Ecological baseline data – bats (BID EC-011-00001);
- Ecological baseline data – white-clawed crayfish and other invertebrates (BID EC-012-00001); and
- Ecological baseline data – fish (BID EC-013-00001).

1.1.6 Note that baseline data for badger is not made publicly available due to the current and historic persecution of this species (BID EC-14-00001).

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**Table 1: Summary of local/parish level adverse effects arising from the construction and operation of the Proposed Scheme within MA03**

CA	Habitat, species or species group	Receptor/location	Effect arising from construction or from operation	Description of effect prior to 'other mitigation'	Effect addressed by mitigation and/or compensation proposed (Yes / No)
MA03	Woodland	Five woodlands, each less than 1.5ha and none within wildlife designations.	Construction	Permanent loss of 1ha of habitat as a result of construction of the Proposed Scheme.	Yes
MA03	Grassland	Parcels of species-poor, semi-improved grassland, collectively, covers an area of 79ha throughout the Pickmere to Agden and Hulseheath area, within the land required for construction of the Proposed Scheme.	Construction	Permanent loss of 79ha (100%) of habitat as a result of construction of the Proposed Scheme.	Yes
MA03	Grassland	Parcels of marshy grassland, covering an area less than 0.1ha at several locations at High Legh Park Golf Club within and adjacent to the land required for construction of the Proposed Scheme.	Construction	Permanent loss of less than 0.1ha (20%) of habitat as a result of construction of the Proposed Scheme.	Yes
MA03	Watercourses	Several smaller watercourses, including those associated with Smoker Brook, Waterless Brook/Arley Brook, Tabley Brook and Millington Clough.	Construction	Permanent and temporary loss and degradation of habitat as a result of realignment or culverting of smaller watercourses during construction of the Proposed Scheme.	Yes
MA03	Amphibians	Populations of other amphibian species, including palmate newt ( <i>Lissotriton helveticus</i> ), smooth newt ( <i>Lissotriton vulgaris</i> ), common toad ( <i>Bufo bufo</i> ) and common frog ( <i>Rana temporaria</i> ), in the Pickmere to Agden and Hulseheath area.	Construction	Loss and fragmentation of breeding/foraging habitat and dispersal routes from construction activities.	Yes
MA03	Birds	Breeding hobby ( <i>Falco subbuteo</i> ) near Tabley.	Construction	Permanent loss and degradation of habitat used by breeding hobby as a result of construction of the Proposed Scheme.	Yes

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CA	Habitat, species or species group	Receptor/location	Effect arising from construction or from operation	Description of effect prior to 'other mitigation'	Effect addressed by mitigation and/or compensation proposed (Yes / No)
MA03	Birds	Wintering bird assemblage between Tabley Grange and B5391 Pickmere Lane.	Construction	Permanent loss and degradation of habitat used by wintering birds as a result of construction of the Proposed Scheme.	Yes
MA03	Birds	Wintering bird assemblage between Park Farm and Agden Brow.	Construction	Permanent loss and degradation of habitat used by wintering birds as a result of construction of the Proposed Scheme.	Yes
MA03	Birds	Wintering bird assemblage between Chapel Lane and Agden Bridge Farm.	Construction	Permanent loss and degradation of habitat used by wintering birds as a result of construction of the Proposed Scheme.	Yes
MA03	Birds	Breeding bird assemblage between B5391 Pickmere Lane and Litley Farm.	Construction	Permanent loss and degradation of habitat used by breeding birds as a result of construction of the Proposed Scheme.	Yes
MA03	Birds	Wintering bird assemblage between B5391 Pickmere Lane and Litley Farm.	Construction	Permanent loss and degradation of habitat used by wintering birds as a result of construction of the Proposed Scheme.	Yes
MA03	Birds	Breeding bird assemblage between Pownallgreen Farm and Park Farm.	Construction	Permanent loss and degradation of habitat used by breeding birds as a result of construction of the Proposed Scheme.	Yes
MA03	Birds	Breeding bird assemblage between Park Farm and Agden Brow.	Construction	Permanent loss and degradation of habitat used by breeding birds as a result of construction of the Proposed Scheme.	Yes
MA03	Birds	Wintering bird assemblage between Pownallgreen Farm and Hoo Green.	Construction	Permanent loss and degradation of habitat used by wintering birds as a result of construction of the Proposed Scheme.	Yes



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CA	Habitat, species or species group	Receptor/location	Effect arising from construction or from operation	Description of effect prior to 'other mitigation'	Effect addressed by mitigation and/or compensation proposed (Yes / No)
MA03	Birds	Wintering bird assemblage between Betley Hurst Farm and Chapel Lane.	Construction	Permanent loss and degradation of habitat used by wintering birds as a result of construction of the Proposed Scheme.	Yes
MA03	Birds	Kingfisher ( <i>Alcedo atthis</i> ) populations in the Pickmere to Agden and Hulseheath area.	Construction	Permanent loss and degradation of habitat potentially used by breeding kingfisher as a result of construction of the Proposed Scheme.	Yes
MA03	Aquatic macro-invertebrates	Aquatic macro-invertebrates in Tributary of Tabley Brook 3.	Construction	Temporary loss and degradation of aquatic habitat where the Proposed Scheme crosses watercourses.	Yes
MA03	Aquatic macro-invertebrates	Aquatic macro-invertebrates in Tributary of Tabley Brook 8.	Construction	Temporary loss and degradation of aquatic habitat where the Proposed Scheme crosses watercourses.	Yes
MA03	Fish	Fish assemblage in Agden Brook.	Construction	Temporary loss and degradation of aquatic habitat where the Proposed Scheme crosses watercourses.	Yes
MA03	Badger	Population of badgers ( <i>Meles meles</i> ) at undisclosed locations in the Pickmere to Agden and Hulseheath area.	Construction and operation	Permanent loss and degradation of habitat / habitat fragmentation resulting from construction of the Proposed Scheme. One main sett was recorded within land required for construction of the Proposed Scheme, a further six main setts were recorded within 525m of the land required for construction of the Proposed Scheme. Land required for the Proposed Scheme includes pasture, arable, hedgerow and woodland habitats that form a foraging resource for badger social groups.	Yes
MA03	Reptiles	Potential small populations of common reptiles in the Pickmere to Agden and Hulseheath area.	Construction	Permanent loss and degradation of small areas of suitable habitat including field margins, edges of woodland and scrub habitat and isolated small	Yes

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CA	Habitat, species or species group	Receptor/location	Effect arising from construction or from operation	Description of effect prior to 'other mitigation'	Effect addressed by mitigation and/or compensation proposed (Yes / No)
				patches of overgrown grassland as a result of construction of the Proposed Scheme.	







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