

Appendix 5.6

Breeding Birds Survey Report

**Stafford Western Access Route Environmental Statement
Volume 3 – Technical Appendices
Appendix 5.6: Breeding Birds Survey Report**

URS

Breeding Bird Survey Report

MHA PSP1 STA Western
Access Route

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REVISION SCHEDULE

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FIGURE 1. BREEDING BIRD SURVEY – STUDY AREA

FIGURE 2: BREEDING BIRD SURVEY – RED AND AMBER SPECIES

1 INTRODUCTION

1.1 Scope of Works

URS Infrastructure and Environment UK Ltd. was commissioned by Staffordshire County Council to undertake a breeding bird survey of land to the west of Stafford town centre, Staffordshire. The survey area was located within part of the Doxey and Tillington Marshes Site of Special Scientific Interest (SSSI) closest to where construction of the proposed Western Access Route is located.

1.2 Location

The proposed route of the Western Access Route is located in Stafford, adjacent to the Doxey Road, Sainsbury's supermarket car parks and the River Sow to the north with the old railway line public footpath running through it. The Study Area for breeding bird surveys is illustrated on **Figure 1**.

1.3 Legal Protection

All birds, their nests and eggs are protected under the Wildlife and Countryside Act 1981 (as amended) whilst actively nesting. Birds listed on Schedule 1 of this Act also have protection of the birds and young from disturbance at the nest.

The Doxey and Tillington Marshes SSSI is a protected site, one of the aspects of the designation of the site is the significance of the numbers of breeding snipe (*Gallinago gallinago*). Other regular breeding species within the citation are great crested grebe (*Podiceps cristatus*), little grebe (*Tachybaptus ruficollis*), tufted duck (*Aythya fuligula*), reed warbler (*Acrocephalus scirpaceus*), sedge warbler (*Acrocephalus schoenobaenus*), redshank (*Tringa totanus*) and lapwing (*Vanellus vanellus*). With occasional breeders including; kingfisher (*Alcedo atthis*), teal (*Anas crecca*), grasshopper warbler (*Locustella naevia*), whinchat (*Saxicola rubetra*) and water rail (*Rallus aquaticus*).

2 METHODS

2.1 Data Search

A data search for the site was obtained from the Staffordshire Ecological Record (SER).

2.2 Study Area

The study area for breeding bird surveys was focussed on the area of Doxey and Tillington Marshes SSSI as this was considered to be of highest value to breeding birds. The SSSI is also designated, in part, for its ornithological interest and was considered to have the potential to support a good assemblage of breeding birds. Other areas of habitat around the proposed route were considered unlikely to support more than a common assemblage of breeding birds in low numbers and were therefore not subject to detailed survey.

2.3 Breeding Bird Survey

A total of five breeding bird survey visits using the 'cut-down territory mapping' method (from Bibby et al 2000) were undertaken on a monthly basis between April and June 2014. This method involves walked transects undertaken during the dawn or dusk periods of good weather around ditch boundaries, public footpaths and features across the Study Area. Every area is walked to within 50m of every locations within the Study Area. Visits lasted up to three hours to cover all areas of the site, which due to the ditches on site involved an amount of back tracking. The surveys incorporated four dawn visits and one dusk visit incorporating all

suitable habitats within the Study Area. The dates and weather conditions of each survey are shown in **Table 1**, these were recorded at the beginning of the survey.

Table 1: Dates and weather conditions of survey visits.

Date	Temperature (°C)	Cloud cover	Wind (Beaufort scale)
16 April 2014	3	1/8	F1 S
30 April 2014	8	6/8	F1 S
22 May 2014	16	6/8	No wind
9 May 2014	12	3/8	F1 W
24 June 2014	14	1/8	F1-2 W

3 RESULTS

3.1 Data Search

Within the data search supplied by SER there was a total of 19,603 records of birds. Of these 2,629 are listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended). Schedule 1 species included northern goshawk (*Accipiter gentilis*), marsh warbler (*Acrocephalus palustris*), kingfisher (*Alcedo atthis*), bittern (*Botaurus stellaris*), Temminck's stint (*Calidris temmenckii*), Cetti's warbler (*Cettia cetti*), little ringed plover (*Charadrius dubius*), black tern (*Chlidonias niger*), quail (*Coturnix coturnix*), corncrake (*Crex crex*), whooper swan (*Cygnus cygnus*), merlin (*Falco columbarius*), peregrine (*Falco peregrinus*), brambling (*Fringilla montifringilla*), Mediterranean gull (*Larus melanocephalus*), black-tailed godwit (*Limosa limosa*), bluethroat (*Luscinia svecica*), common scoter (*Melanitta nigra*), European bee-eater (*Merops apiaster*), red kite (*Milvus milvus*), whimbrel (*Numenius phaeopus*), Leach's storm-petrel (*Oceanodroma leucorhoa*), osprey (*Pandion haliaetus*), bearded tit (*Panurus biarmicus*), red-necked phalarope (*Phalaropus lobatus*), ruff (*Philomachus pugnax*), black redstart (*Phoenicurus ochruros*), spoonbill (*Platalea leucorodia*), black-necked grebe (*Podiceps nigricollis*), spotted crake (*Porzana porzana*), firecrest (*Regulus ignicapilla*), little tern (*Sternula albifrons*), wood sandpiper (*Tringa glareola*), green sandpiper (*Tringa ochropus*), redwing (*Turdus iliacus*), fieldfare (*Turdus pilaris*), barn owl (*Tyto alba*) and hoopoe (*Upupa epops*).

3.2 Breeding Bird Survey

A total of 21 species were recorded to be breeding within the Study Area. These were recorded all over the Study Area. A number of the species recorded are listed as Birds of Conservation Concern (BoCC), including three species on the red list; and six species on the amber list.

All the breeding species recorded within the Study Area are shown in **Table 2** below. Red list and amber list species records are illustrated on **Figure 2**.

Table 2: Breeding birds recorded on the Study Area.

Common name	Scientific name	Breeding pairs/territories	Red list species	Amber list species
Blackbird	<i>Turdus merula</i>	4		

Common name	Scientific name	Breeding pairs/territories	Red list species	Amber list species
Blackcap	<i>Sylvia atricapilla</i>	4		
Chaffinch	<i>Fringilla coelebs</i>	1		
Chiffchaff	<i>Phylloscopus collybita</i>	4		
Dunnock	<i>Prunella modularis</i>	3		Yes
Garden warbler	<i>Sylvia borin</i>	1		
Goldfinch	<i>Carduelis carduelis</i>	4		
Grasshopper warbler	<i>Locustella naevia</i>	1	Yes	
Great tit	<i>Parus major</i>	3		
Greenfinch	<i>Carduelis chloris</i>	3		
House sparrow	<i>Passer domesticus</i>	2	Yes	
Mallard	<i>Anas platyrhynchos</i>	1		Yes
Reed bunting	<i>Emberiza schoeniclus</i>	2		Yes
Reed warbler	<i>Acrocephalus scirpaceus</i>	1		Yes
Robin	<i>Erithacus rubecula</i>	3		
Sedge warbler	<i>Acrocephalus schoenobaenus</i>	10		
Song thrush	<i>Turdus philomelos</i>	3	Yes	
Whitethroat	<i>Sylvia communis</i>	1		Yes
Willow warbler	<i>Phylloscopus trochilus</i>	2		Yes
Wood pigeon	<i>Columba palumbus</i>	1		
Wren	<i>Troglodytes troglodytes</i>	12		

The species recorded within the Study Area represent a bird assemblage typical of wetland and scrub woodland habitat complex. Of the species recorded during the breeding bird survey, three of these also occurred on the Doxey and Tillington SSSI citation; these were three warblers: grasshopper; sedge; and reed warbler.

3.3 Other bird species

Along with the breeding species utilising the Study Area, there were also 14 species and one hybrid that were recorded foraging or otherwise using the Study Area. This included not only

the trees and hedgerows but the ditches and river as well. These species included one red list species and two amber list species as detailed on the BoCC. These species along with the maximum counts are detailed in **Table 3** below.

Table 3: Other bird species recorded on Study Area.

Common name	Scientific name	Highest count recorded	Red list species	Amber list species
Blue tit	<i>Cyanistes caeruleus</i>	2		
Canada goose	<i>Branta canadensis</i>	13		
Canada/greylag goose hybrid	<i>Branta canadensis x Anser anser</i>	2		
Carrion crow	<i>Corvus corone</i>	1		
Feral pigeon	<i>Columba livia</i>	2		
Grey heron	<i>Ardea cinerea</i>	2		
Greylag goose	<i>Anser anser</i>	1		
Long-tailed tit	<i>Aegithalos caudatus</i>	2		
Magpie	<i>Pica pica</i>	2		
Mistle thrush	<i>Turdus viscivorus</i>	1		Yes
Moorhen	<i>Gallinula chloropus</i>	1		
Pheasant	<i>Phasianus colchicus</i>	1		
Rook	<i>Corvus frugilegus</i>	1		
Starling	<i>Sturnus vulgaris</i>	9	Yes	
Swallow	<i>Hirundo rustica</i>	1		Yes

4

DISCUSSION

There are two Schedule 1 species, namely kingfisher and water rail, listed on the Doxey and Tillington Marshes SSSI citation, however, neither of these species was recorded during the surveys. While the water rail is a cryptic species, seldom seen, no calls of this species were recorded in any of the survey areas. No kingfisher was seen or heard during the survey. Therefore the proposals are considered to have negligible potential to affect these species.

There were 35 species and one hybrid species recorded during the breeding bird survey. Twenty-one of these were recorded breeding within the Study Area; of these three were red list species and six amber list species. Of note were the recordings during breeding bird surveys of reed warbler, sedge warbler, grasshopper warbler and swallow; and records from the desk study of snipe, little grebe, tufted duck, redshank, lapwing, teal, whinchat, sand martin, house martin and yellow wagtail, all of which are mentioned in the citation for Doxey

and Tillington Marshes SSSI. Whilst the habitats within the chosen study area offer opportunities for the majority of these species, whinchat is generally found in upland areas and sand martin around gravel pits. Since the proposed Western Access Route will result in direct impacts on only one unit of the SSSI, which is noted as destroyed owing to the presence of a car park, it is considered that the proposed scheme will only result in indirect impacts on bird species using the Study Area if works are undertaken near to where they are nesting, though many of the bird species are habituated to noise and activity. This is due to the location of this area near to heavy traffic in the form of roads and extensive car parking including use at all hours with the many lorries that use the car park. There are also extensive footpaths in the location which are regularly used by the public including dog walkers.

As part of the mitigation/compensation/enhancement measures proposed for the scheme, the habitats recorded within the SSSI have been used as a template for design of restoration of the SSSI land classified as destroyed and further car park areas to the west of the road route. A restoration scheme has been developed in discussion with Staffordshire Wildlife Trust and the Environment Agency which consists of a mosaic of wetland habitats including wet woodland, willow scrub, ditches, swamp and wet grassland.

During the construction period of the scheme, measures will be put in place to reduce the potential for disturbance of breeding birds including the removal of vegetation outside of the nesting season and installation of screens/dead hedging to reduce visual and noise disturbance when works are being undertaken in particularly sensitive areas of the site.

5**REFERENCES**

Institute for Environmental Assessment (1995)

Guidelines for baseline ecological assessment. E & FN Spon, London.

Eaton MA, Brown AF, Noble DG, Musgrove AJ, Hearn R, Aebischer NJ, Gibbons DW, Evans A and Gregory RD (2009)

Birds of Conservation Concern 3: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man. British Birds 102, pp296–341.

Bibby, C.J.; Burgess, N.D.; Hill, D.A. & Mustoe, S. H. (2000)

Bird Census Techniques 2nd. Ed. Academic Press, London.

Figure 1: Breeding Bird Survey – Study Area

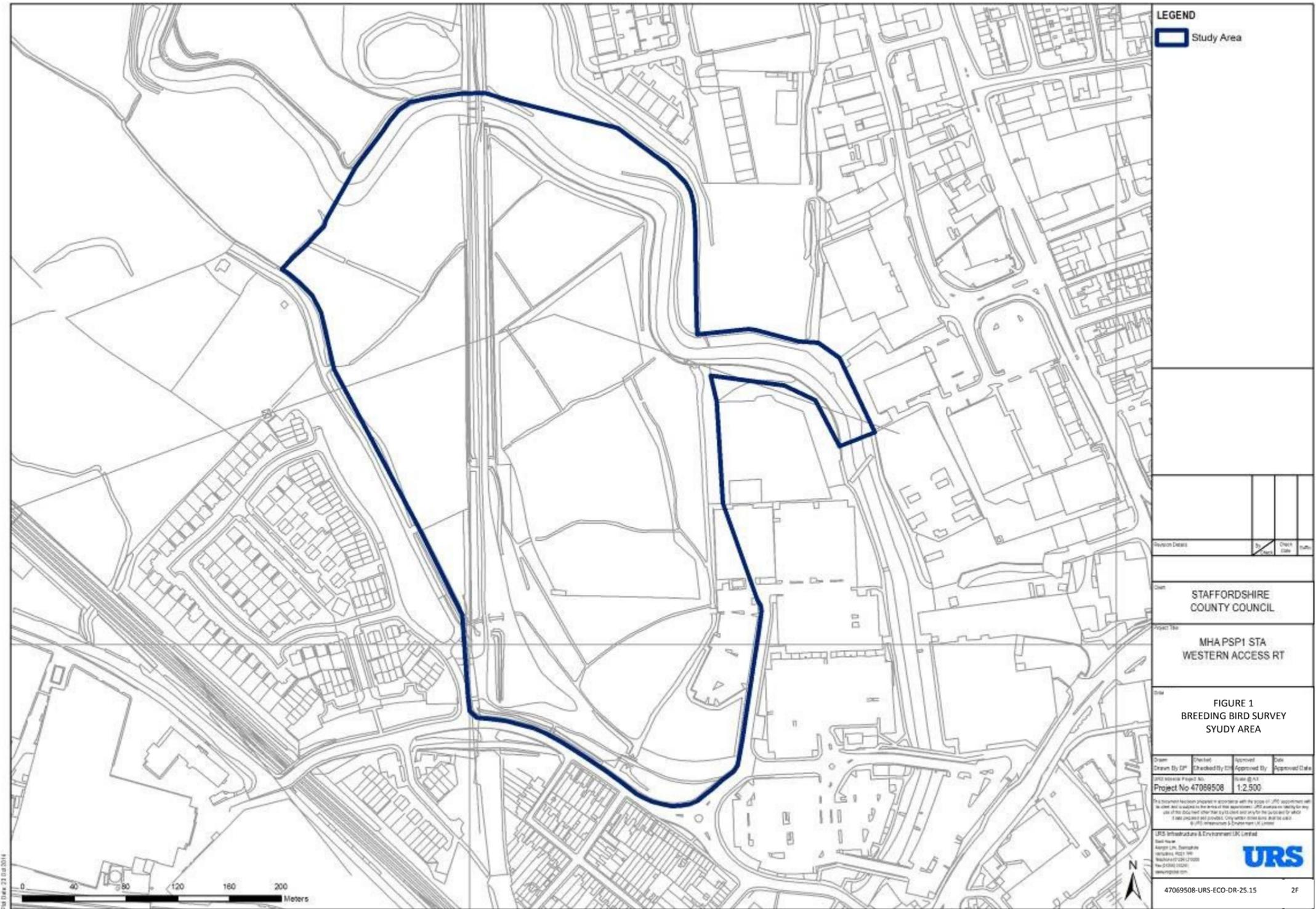


Figure 2: Breeding Bird Survey – Red and Amber Species

