

**M42 Junction 6 Improvement  
Scheme Number TR010027  
Volume 6  
6.3 Environmental Statement  
Appendix 9.14 Water Vole Survey Report**

Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed  
Forms and Procedure) Regulations 2009

January 2019

Infrastructure Planning

Planning Act 2008

**The Infrastructure Planning  
(Applications: Prescribed Forms  
and Procedure) Regulations 2009**

**M42 Junction 6 Improvement  
Development Consent Order 202[ ]**

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**6.3 Environmental Statement  
Appendix 9.14 Water Vole Survey Report**

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HIGHWAYS ENGLAND

# M42 JUNCTION 6 IMPROVEMENT WATER VOLE SURVEY REPORT

MAY 05, 2017

CONFIDENTIAL







# M42 JUNCTION 6 IMPROVEMENT WATER VOLE SURVEY REPORT

FINAL  
CONFIDENTIAL

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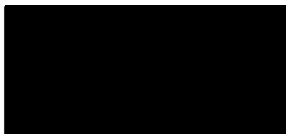
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# TABLE OF CONTENTS

1	INTRODUCTION .....	1
1.1	Background.....	1
1.2	Scheme Location.....	1
1.3	Study Area.....	1
1.4	Study Aims and Objectives.....	1
2	METHODOLOGY .....	2
2.1	Desk Study.....	2
2.2	Field Survey.....	2
2.3	Limitations.....	2
3	RESULTS .....	3
3.1	Desk Study.....	3
3.2	Field Survey.....	3
4	EVALUATION AND RECOMMENDATIONS .....	4
4.1	Water Vole.....	4
5	FIGURES .....	5
5.1	Figure 1: Watercourse Map.....	5



# 1 INTRODUCTION

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## 1.1 BACKGROUND

WSP (formerly Mouchel) was commissioned by Highways England to undertake ecological surveys to inform the proposed M42 Junction 6 Improvement Scheme. An extended Phase 1 habitat survey was undertaken by Mouchel in February 2017. During this survey, habitats within and adjacent to the proposed scheme were assessed for their suitability to support protected species. Three watercourses were identified as being suitable for water vole *Arvicola amphibius*.

Water vole surveys were undertaken in May 2017, the aim of which was to confirm the presence or likely absence of water vole and assess likely impacts of the proposed scheme on this species, if present. This report presents the results of the survey work undertaken.

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## 1.2 SCHEME LOCATION

At the time of writing, three possible route options (Options 1, 2 and 3) are being considered. All three options are predominantly located to the south west of Junction 6 close to the village of Bickenhill, although all route options also include improvements to the junction itself. The land within the proposed scheme is predominantly used for agriculture and pasture grazing, although the scheme is also close to the National Exhibition Centre (NEC), Birmingham International Railway Station and Birmingham Airport as well as proposed developments including High Speed 2 (HS2) route and terminal, a Motorway Service Area (MSA) and UK Central development.

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## 1.3 STUDY AREA

A study area extending up to 1km from the proposed route was defined, with field surveys focussing on three watercourses present within the footprint of the scheme (see Figure 1): Hollywell Brook, which passes beneath the M42 at OS grid reference SP198836, Shadow Brook, which passes beneath the M42 at SP192809 and an unnamed watercourse, which passes beneath the motorway at SP194821.

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## 1.4 STUDY AIMS AND OBJECTIVES

The study sought to determine whether water vole are present within suitable habitats within the study area and if so, to determine likely impacts of the proposed scheme on this species. To achieve this, a review of records of protected species obtained from environmental bodies was undertaken, along with field surveys to search for evidence of water vole within suitable habitats within the study area.

## 2 METHODOLOGY

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### 2.1 DESK STUDY

Warwickshire Biological Records Centre, the local biological records centre, and the ENVIS database kept by Highways England was consulted to collate historical ecological records from within the study area.

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### 2.2 FIELD SURVEY

A survey was undertaken in May 2017 to search for evidence of water vole. Surveys were undertaken in line with guidance set out in the Water Vole Mitigation Guidelines<sup>1</sup>. The extent of the watercourses surveyed is shown in Figure 1. Where accessible, the banks of the watercourses were surveyed from within the channel. Surveyors systematically searched along each bank and any evidence of water vole, including burrows, latrines, droppings, feeding remains and runs within the vegetation was recorded when found. Where surveyors were unable to access the watercourse channel, evidence was searched for from the top of the banks, using binoculars as required.

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### 2.3 LIMITATIONS

There were no limitations to the survey work undertaken.

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<sup>1</sup> Dean, M., Strachan, R., Gow, D. and Andrews, R. (2016) The Water Vole Mitigation Handbook (The Mammal Society Mitigation Guidance Series). Eds Fiona Mathews and Paul Chanin. The Mammal Society, London.

## 3 RESULTS

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### 3.1 DESK STUDY

No records of water vole from within the study area were returned from the desk study.

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### 3.2 FIELD SURVEY

No evidence of water vole was found during the field surveys undertaken in May 2017.

The habitats were generally found to be unsuitable for water vole. Both Shadow Brook and the unnamed watercourse were largely dry along their lengths and the section of Hollywell Brook to the west of the M42 is set within a concrete channel. To the east of the M42, Hollywell Brook is set within steep earth banks, although heavy shading means that vegetation on the banks is limited. Several areas were also poached by livestock. Therefore, a second survey visit was not undertaken on the basis that the habitats are of low suitability for water vole.

## 4 EVALUATION AND RECOMMENDATIONS

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### 4.1 WATER VOLE

No evidence of water vole was found within the survey area and the habitats are considered to be of low suitability for water vole. As such, no further surveys or mitigation in respect of water vole are recommended.



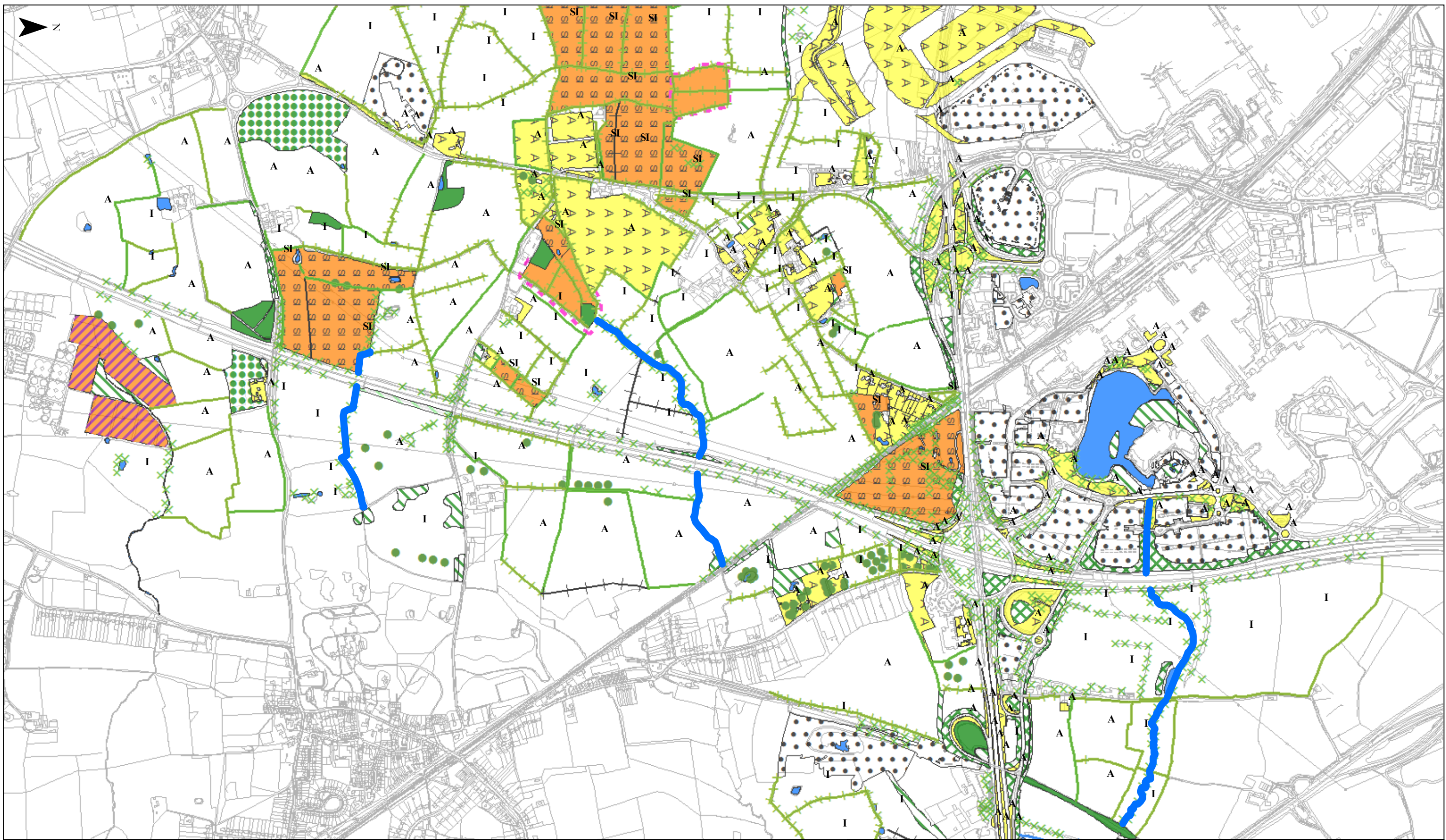
## 5 FIGURES

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### 5.1 FIGURE 1: WATERCOURSE MAP







**Legend**

Surveyed Watercourse

A A

Amenity Grassland

(A)rable/(I)mproved Grassland

Bare Ground

Broad-leaved Plantation Woodland

Broad-leaved Semi-natural Woodland

SSSI

Coniferous Plantation Woodland

Dense Scrub

Marshy Grassland

Mixed Semi-natural Woodland

SI SI

Semi-improved Grassland

Standing Water

Unimproved Neutral Grassland

Fenc e

Species Poor Defunct Hedge

Species Poor Hedge and Trees

Species Poor Intact Hedge

Watercourse

Scrub

Tree

Client

Highways England

Project

M42 J6 Improvement Scheme

Drawing Title

Watercourse Map

A

First Issue

15/05/17

29/05/17

12/05/17

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Amendment

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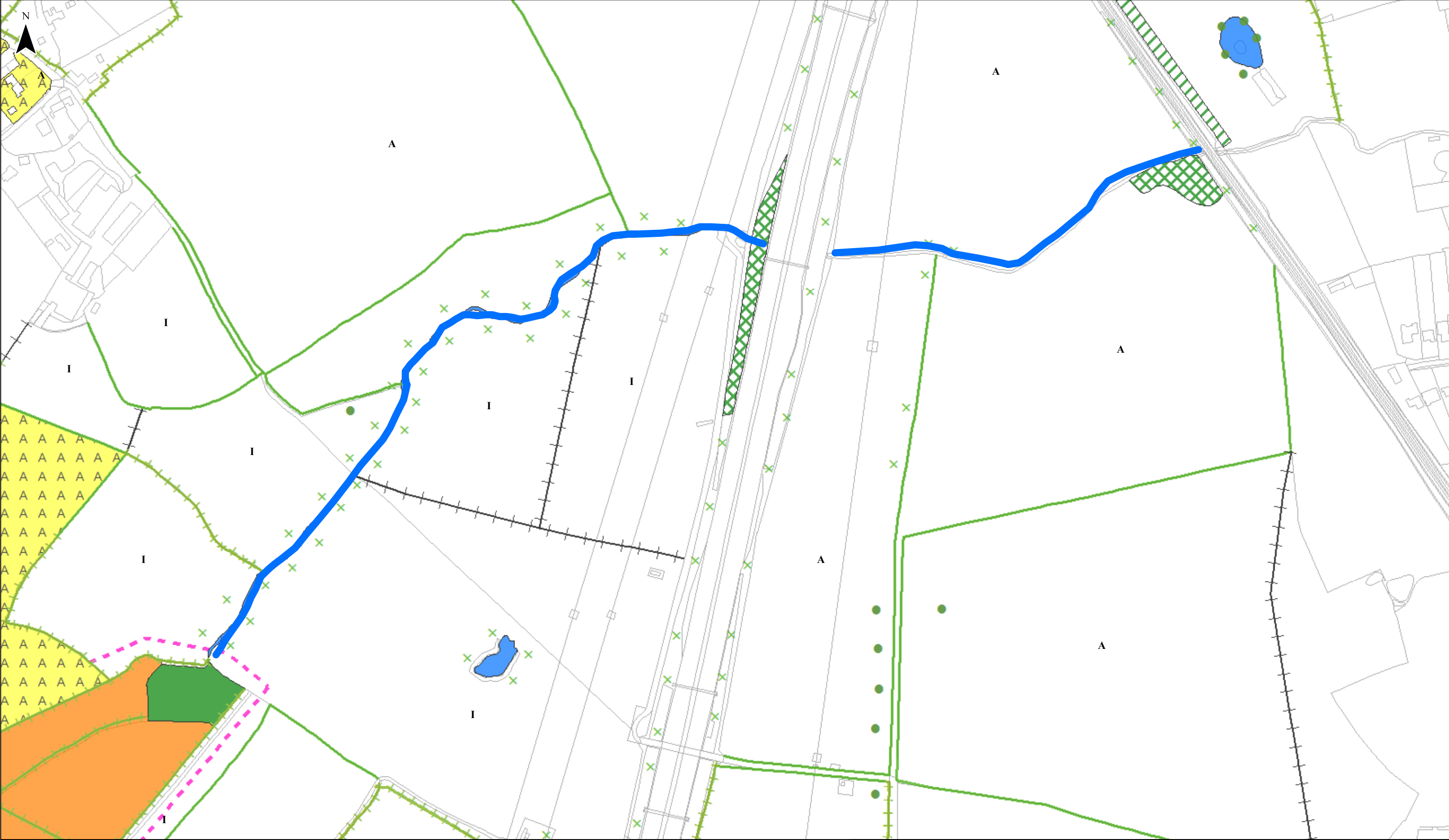
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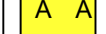






**Legend**


 Surveied Watercourse


**Habitats**


 Amenity Grassland


 (A)rable/(I)mproved Grassland


 Bare Ground


 Broad-leaved Plantation Woodland


 Broad-leaved Semi-natural Woodland


 SSSI


 Coniferious Plantation Woodland


 Dense Scrub


 Marshy Grassland


 Mixed Semi-natural Woodland


 Semi-improved Grassland


 Standing Water


 Unimproved Neutral Grassland


 Fenc e


 Species Poor Defunct Hedge

 Species Poor Hedge and Trees

 Species Poor Intact Hedge

 Watercourse

 Scrub

 Tree

Client

Highways England


Project

M42 J6 Improvement Scheme

Drawing Title

Watercourse Map

A	First Issue	15/05/17 JR	29/05/17 LE	12/05/17 AB
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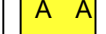






**Legend**


 Surve yed Watercourse


**Habitats**


 Amenity Grassland


 (A)rable/(I)mproved Grassland


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 Broad-leaved Plantation Woodland


 Broad-leaved Semi-natural Woodland


 SSSI


 Coniferous Plantation Woodland


 Dense Scrub


 Marshy Grassland


 Mixed Semi-natural Woodland


 Semi-improved Grassland


 Standing Water


 Unimproved Neutral Grassland


 Fenc e


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