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# The Norfolk County Council (Norwich Northern Distributor Road (A1067 to A47(T))) Order

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## Breydon Water, The Broads and Broadland - Habitat Regulations Assessment

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Planning Act 2008

Infrastructure Planning

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

*PINS Reference Number: TR010015*

*Document Reference: NCC/EX/84*

*Author: Norfolk County Council*

Revision	Date	Description
0	9 <sup>th</sup> October 2014	Revision For Submission

<b>Mott MacDonald Internal Audit</b>			
<b>Revision</b>	<b>Originator</b>	<b>Checked By</b>	<b>Approved By</b>
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*This document is submitted in relation to the application for a proposed development by Norfolk County Council to the Planning Inspectorate, under the Planning Act 2008.*

*The application is for the Norfolk County Council (Norwich Northern Distributor Road (A1067 to A47(T))) Order, to grant development consent for the construction of a new highway running west-east between the A1067 Fakenham Road and the A47 Trunk Road at Postwick, including improvements to the existing highway network to the north and north east of Norwich.*

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## 1. Introduction

### 1.1 Background

- 1.1.1 Mott MacDonald Ltd was appointed by Norfolk County Council to undertake a Habitats Regulations Assessment, in support of the development consent application for the Norwich Northern Distributor Road (NDR) Project in Norfolk ('the project'). The findings of this assessment are presented in this document which constitutes a Habitats Regulations Report in accordance with the requirements of the Highways Agency's Design Manual for Roads and Bridges Volume 11 Section 4 Part 1 (HD 44/09) and Interim Advice Note 141/11.
- 1.1.2 The NDR is a project of national significance which requires a DCO under the Planning Act 2008. In accordance with Regulation 5(2)(g) of The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended) (The APFP Regulations) the development consent application must be accompanied by a report identifying any Natura 2000 site ('European site') or any Ramsar site, which may be affected by the proposed development, together with sufficient information that will enable the Competent Authority if required to make an appropriate assessment of the implications for the site.

### 1.2 Purpose of the Habitats Regulations Assessment

- 1.2.1 In accordance with Article 6(3) of the Habitats Directive 'Article 6 Assessments' are required where a plan or project not directly connected with or necessary to the management of a Natura 2000 site(s), may give rise to significant effects upon a Natura 2000 site(s). The requirement for Article 6 Assessments has been transposed into UK law under Regulation 61(2) of the Conservation of Habitats and Species Regulations 2010 ('Habitats Regulations') (S.I. 2010/490) (as amended) and is commonly referred to as a 'Habitats Regulations Assessment' (HRA) or an 'Appropriate Assessment' (AA). 'Appropriate Assessment' is taken to mean an assessment which is "appropriate to its purpose under the Habitats Directive and Habitats Regulations" and is not to be confused with the second of the Article 6 Assessments with the same name (Department for Communities and Local Government (DCLG), 2006).
- 1.2.2 Natura 2000 sites include Special Protection Areas (SPAs), Special Areas for Conservation (SACs), candidate SACs and proposed SPAs, as well as Sites of Community Importance (SCIs) which have been adopted by the EC, but not

yet formally designated by the government of Member State. In the UK, Ramsar sites are also required to undergo an assessment when a plan or project is considered likely to have a significant effect upon a site (Department for Environment, Food and Rural Affairs (Defra), 2006). Herein Ramsar sites are also referred to as Natura 2000 sites.

- 1.2.3 Before deciding to undertake a plan or project that may give rise to significant effects upon a Natura 2000 site, and that is not directly connected with or necessary to the management of a Natura 2000 site, a Competent Authority must make an assessment of the implications for that site in view of that site's conservation objectives. In the context of a DCO application under the Planning Act 2008 the Secretary of State is considered to be the Competent Authority with regard to Regulation 7(1) of the Habitats Regulations (The Planning Inspectorate, 2012). The Competent Authority must also consult with the Statutory Nature Conservation Body (SNCB), in this case Natural England (NE), and have regard to any representations made by that body. If other regulatory regimes require an HRA the applicant should also consult with the relevant competent authorities to determine if they are likely to adopt the outcomes of the HRA carried out by the Competent Authority under the Planning Act 2008.
- 1.2.4 The HRA is undertaken in a series of stages in the case of the assessment of projects (DCLG, 2006). These stages correspond with the Article 6 Assessments prescribed by the Habitats Directive (Figure 1.1). Each stage determines whether further stages in the process are required. The first stage identifies likely significant effects by identifying the presence or absence of significance indicators. If the conclusion of Stage 1 is that there will be no significant impacts on the Natura 2000 site, there is no requirement to undertake further stages.

### **1.3 Methodology**

- 1.3.1 This Screening Assessment has been undertaken in accordance with Design Manual for Roads and Bridges (DMRB) Volume 11 Section 4 Part 1 (HD 44/09) and supporting guidance contained in IAN 141/11 Assessment of Implications (of Highways and/or Roads Projects) on European Sites (Including Appropriate Assessment) and the Planning Act 2008. These documents provide guidance for assessment of the implications of highway construction or improvement projects, including technology or maintenance projects on 'European Sites', where such sites are designated for their nature conservation interests.



1.3.2 Decommissioning has not been considered as there is sufficient uncertainty with regards to whether the road would be decommissioned at any time in the future. Such a plan would be subjected to a Habitats Regulations Assessment, taking into account the baseline conditions at such a time in the future that may differ markedly from the current baseline condition.

#### **1.4 Area of Interest**

1.4.1 The locations of the designated sites under consideration in this report are in Appendix B the following sites were considered:

- Breydon Water SPA - 15.2km from the Scheme
- Breydon Water Ramsar - 15.2km from the Scheme
- Broadland SPA - 1.7km from the Scheme
- Broadland Ramsar - 1.7km from the Scheme
- Broads SAC – 1.7km from the Scheme

1.4.2 These sites are not directly affected by the works but are predicted to experience an increase in traffic flows on adjacent roads as a result of the NDR. Consultation with Natural England (NE) and the Environment Agency (EA) has been undertaken (Appendix A).

#### *Wensum SAC*

1.4.3 It should be noted that an Appropriate Assessment has been undertaken for the Wensum SAC and can be found in Volume 2 Chapter 17 of the Environmental Statement (Doc Ref 6.2) a subsequent addendum to the HRA has been produced and been submitted to NE and the EA. This has resulted in production of a Mitigation Management Action Plan (MMAP) that seeks to prevent silt from entering the Wensum SAC and to provide for betterment. The MMAP will be agreed by NE and the EA and be secured through the DCO Requirement 25.

## 2. Screening Information Checklist

### 2.1 Checklist

2.1.1 The following checklist DMRB Vol 11 Part 1 Section 4 Annex B determines if the appropriate level of information is available in order to undertake the assessment.

*Table 2.1: Screening Information Checklist*

<b>Screening</b>	
Project reference: NDR	
Date of completion: July 2014	
Author: J Fookes	
Verified: M Frith	
Have these features of the project been identified?	
Size, scale, area, land-take, etc.	Yes
Physical and Biological characteristics of area affected by the project	Yes
Physical changes that will flow from the project (from excavation, piling, dredging, etc.)	Yes
Resource requirements (water abstraction etc.)	Yes
Emissions and waste (disposal to land, water or air)	Yes
Transportation requirements	Yes
Duration of construction, operation, etc.	Yes
Project programme	Yes
Distance from European Site	Yes

Information on qualifying interests of the European Site	Yes
Cumulative impacts with other projects or plans (with indication of assumptions)	Yes
Sources of information:  Environmental Statement for the NDR (Doc Ref 6.1 and 6.2)  Natura 2000 Standard Data form for the Site	
<b>Are the following known:</b>	
Full characteristics of the project which may affect the site	Yes
Size and other specifications of the project	Yes
The characteristics of existing, proposed or other approved projects or plans which may cause interactive or cumulative impacts with the project being assessed and which may affect the site	Yes
Planned or contemplated nature conservation initiatives likely to affect the status of the site in the future	Yes
The relationship (e.g. key distances, etc.) between the project and the European Site	Yes
The information requirements (e.g. EIA/SEA) of the Competent Authority	Yes
The reasons for the designation of the European Site	Yes
The conservation objectives of the site and the factors that contribute to the conservation value of the site	Yes
The conservation status of the site (favourable or otherwise)	Yes
The existing baseline condition of the site	Yes
The key attributes of any Annex I habitats or Annex II species on the site	Yes
The physical and chemical composition of the site	Yes
The dynamics of the habitats, species and their ecology	Yes

Those aspects of the site that are sensitive to change	Yes
The key structural and functional relationships that create and maintain the site's integrity	Yes
The seasonal influences on the key Annex I habitats or Annex II species on the site	Yes
Other conservation issues relevant to the site, including likely future natural changes taking place	Yes

### **3. Screening Matrices**

#### **3.1 Breydon Water Ramsar**

Name of European Site: Breydon Water Ramsar.										
The Scheme: The Norwich Northern Distributor Road, known as “the NDR” is a dual carriageway all-purpose strategic distributor road, to be classified as the A1270 Principal Road, which would link the A1067 Fakenham Road, near Attlebridge, to the A47 Trunk Road (T) at Postwick. This will be over a length of approximately 20.4 km										
Distance to Proposed Scheme: 15.215km										
European site features		Likely Effects on Scheme								
		Effect 1: Traffic Noise			Effect 2: Air Quality			In Combination Effects		
		C	O	D	C	O	D	C	O	D
Tundra swan , <i>Cygnus columbianus bewickii</i>  171 individuals, representing an average of 2.1% of the GB population (5 year peak mean)		None	None	N/A	None	None	N/A	None	None	N/A
			Increases of traffic flows along the Acle Straight of 4% in 2017 and 8% in			Increases of traffic flows along the Acle Straight of 4% in 2017				

<p>1998/9-2002/3)</p> <p>Northern lapwing , <i>Vanellus vanellus</i></p> <p>20142 individuals, representing an average of 1.3% of the GB population (5 year peak mean</p> <p>1998/9-2002/3)</p> <p>This site is an inland tidal estuary at the mouth of the River Yare and its confluence with the Rivers Bure and Waveney and</p>		<p>2032. For noise the rise in traffic flows equates to a less than 1db increase in noise levels. This would be imperceptible to bird populations either adjacent to or at a distance from traffic using the A47.</p>			<p>and 8% in 2032. Could give rise to increases in No<sub>x</sub> emissions.</p> <p>NO<sub>x</sub>: no effects are predicted with the exception of where NO<sub>x</sub> increases are above 2ug/m<sup>3</sup>. this level reduces to below these limits within 10m of the adjacent road, which takes in the</p>				
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<p>an adjacent area of drained floodplain. It has extensive areas of mudflats that are exposed at low tide and these form the only tidal flats on the east coast of Norfolk. It contains a large area of lowland wet grassland. Breydon Water is internationally important for wintering waterfowl.</p>							<p>verges and margins. Therefore there are no predicted effects on the site local area or on the designated site as a whole.</p>							
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### **3.2 Breydon Water SPA**

Name of European Site: Breydon Water SPA										
The Scheme: The Norwich Northern Distributor Road, known as “the NDR” is a dual carriageway all-purpose strategic distributor road, to be classified as the A1270 Principal Road, which would link the A1067 Fakenham Road, near Attlebridge, to the A47 Trunk Road (T) at Postwick. This will be over a length of approximately 20.4 km										
Distance to Proposed Scheme: 15.215km										
European site features		Likely Effects on Scheme								
		Effect 1: Traffic Noise			Effect 2: Air Quality			In Combination Effects		
		C	O	D	C	O	D	C	O	D
Common Tern <i>Sterna hirundo</i> , Avocet <i>Recurvirostra avosetta</i> , Bewick's Swan <i>Cygnus columbianus bewickii</i> , Golden Plover <i>Pluvialis</i>		None	None	N/A	None	None	N/A	None	None	N/A
			Increases of traffic flows along the Acle Straight of 4% in 2017 and 8% in			Increases of traffic flows along the Acle Straight of 4% in 2017				

<p><i>apricaria</i>,           Breydon Water is located at the extreme east of England on the coast of Norfolk. The site is an inland tidal estuary at the mouth of the River Yare and its confluence with the Rivers Bure and Waveney. It has extensive areas of mud-flats that are exposed at low tide and these form the only tidal flats on the east coast of Norfolk. There are also extensive areas of floodplain grassland adjacent to the intertidal areas. Breydon Water is internationally important for wintering waterbirds, some of which feed in</p>		<p>2032. For noise the rise in traffic flows equates to a less than 1db increase in noise levels. This would be imperceptible to bird populations either adjacent to or at a distance from traffic using the A47.</p>			<p>and 8% in 2032. Could give rise to increases in No<sub>x</sub> emissions.           NO<sub>x</sub>: no effects are predicted with the exception of where NO<sub>x</sub> increases are above 2ug/m<sup>3</sup>. this level reduces to below these limits within 10m of the adjacent road, which takes in the</p>				
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the Broadland SPA that adjoins this site at Halvergate Marshes.					verges and margins. Therefore there are no predicted effects on the site local area or on the designated site as a whole.				
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### **3.3 The Broads SAC**

Name of European Site: The Broads SAC.										
The Scheme: The Norwich Northern Distributor Road, known as “the NDR” is a dual carriageway all-purpose strategic distributor road, to be classified as the A1270 Principal Road, which would link the A1067 Fakenham Road, near Attlebridge, to the A47 Trunk Road (T) at Postwick. This will be over a length of approximately 20.4 km										
Distance to Proposed Scheme: 1.7km										
European site features		Likely Effects on Scheme								
		Effect 1: Traffic Noise			Effect 2: Air Quality			In Combination Effects		
		C	O	D	C	O	D	C	O	D
<ul style="list-style-type: none"> <li>• Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara spp.</i></li> <li>• Natural eutrophic lakes with</li> </ul>		None	None	N/A	None	None	N/A	None	None	N/A
						Increases of traffic flows along the Acle Straight of 4% in 2017				

<p><i>Magnopotamion</i>  or <i>Hydrocharition</i>  - type vegetation</p> <ul style="list-style-type: none"> <li>• Transition mires and quaking bogs</li> <li>• Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> * Priority feature</li> <li>• Alkaline Fens</li> <li>• Desmoulin`s whorl snail <i>Vertigo moulinsiana</i>.</li> <li>• Fen orchid <i>Liparis loeselii</i></li> </ul>							<p>and 8% in 2032.  Could give rise to increases in No<sub>x</sub> emissions.</p> <p>NO<sub>x</sub>: no effects are predicted with the exception of where NO<sub>x</sub> increases are above 2ug/m<sup>3</sup>. this level reduces to below these limits within 10m of the adjacent road, which takes in the</p>				
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Ramshorn snail <i>Anisus vorticulus</i>					verges and margins. Therefore there are no predicted effects on the site local area or on the designated site as a whole.				
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### **3.4 Broadland SPA**

Name of European Site: The Broadland SPA										
The Scheme: The Norwich Northern Distributor Road, known as “the NDR” is a dual carriageway all-purpose strategic distributor road, to be classified as the A1270 Principal Road, which would link the A1067 Fakenham Road, near Attlebridge, to the A47 Trunk Road (T) at Postwick. This will be over a length of approximately 20.4 km										
Distance to Proposed Scheme: 1.7 km										
European site features		Likely Effects on Scheme								
		Effect 1: Traffic Noise			Effect 2: Air Quality			In Combination Effects		
		C	O	D	C	O	D	C	O	D
Bittern <i>Botaurus stellaris</i> , 3 individuals representing up to 15.0% of the breeding population in Great Britain (Count as at 1998)		None	None	N/A	None	None	N/A	None	None	N/A
Marsh Harrier <i>Circus</i>			Increases of traffic flows along the Acle Straight of 4% in 2017 and 8% in			Increases of traffic flows along the Acle Straight of 4% in 2017				

<p><i>aeruginosus</i>, 21 pairs representing up to 13.1% of the breeding population in Great Britain (Count as at 1995)</p> <p>Over winter;</p> <p>Bewick's Swan <i>Cygnus columbianus bewickii</i>, 320 individuals representing up to 4.6% of the wintering population in Great Britain (5 year peak mean 1991/2 - 1995/6)</p> <p>Bittern <u><i>Botaurus stellaris</i></u>, 6 individuals representing up to 6.0% of the wintering population in Great Britain</p> <p>Hen Harrier <i>Circus</i></p>		<p>2032. For noise the rise in traffic flows equates to a less than 1db increase in noise levels. This would be imperceptible to bird populations either adjacent to or at a distance from traffic using the A47.</p>			<p>and 8% in 2032. Could give rise to increases in No<sub>x</sub> emissions.</p> <p>NO<sub>x</sub>: no effects are predicted with the exception of where NO<sub>x</sub> increases are above 2ug/m<sup>3</sup>. this level reduces to below these limits within 10m of the adjacent road, which takes in the</p>				
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<p><i>cyaneus</i>, 22 individuals representing up to 2.9% of the wintering population in Great Britain (5 year peak mean 1987/8-1991/2)</p> <p>Ruff <i>Philomachus pugnax</i>, 96 individuals representing up to 13.7% of the wintering population in Great Britain (5 yr peak mean 87/8-91/2)</p> <p>Whooper Swan <i>Cygnus cygnus</i>, 133 individuals representing up to 2.4% of the wintering population in Great Britain (5 yr peak mean 93/4-97/8)</p> <p>This site also qualifies under Article 4.2 of the</p>							<p>verges and margins. Therefore there are no predicted effects on the site local area or on the designated site as a whole.</p>							
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<p>Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:</p> <p>Over winter;</p> <p>Gadwall <i>Anas strepera</i>, 605 individuals representing up to 2.0% of the wintering Northwestern Europe population (RSPB: Count 99/00)</p> <p>Pink-footed Goose <i>Anser brachyrhynchus</i>, 3,290 individuals representing up to 1.5% of the wintering Eastern Greenland/Iceland/UK population (5 yr peak mean 94/5-98/9)</p>									
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<p>Shoveler <i>Anas clypeata</i>, 401 individuals representing up to 1.0% of the wintering Northwestern/Central Europe population (RSPB: Count 99/00)</p> <p>Assemblage qualification: A wetland of international importance.</p> <p>The area qualifies under Article 4.2 of the Directive (79/409/EEC) by regularly supporting at least 20,000 waterfowl</p> <p>Over winter, the area regularly supports 22,603 individual waterfowl (RSPB,</p>									
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Count 99/00) including: Cormorant <i>Phalacrocorax carbo</i> , Bewick's Swan <i>Cygnus columbianus bewickii</i> , Whooper Swan <i>Cygnus cygnus</i> , Ruff <i>Philomachus pugnax</i> , Pink-footed Goose <i>Anser brachyrhynchus</i> , Gadwall <i>Anas strepera</i> , Bittern <i>Botaurus stellaris</i> , Great Crested Grebe <i>Podiceps cristatus</i> , Coot <i>Fulica atra</i> , Bean Goose <i>Anser fabalis</i> , White-fronted Goose <i>Anser albifrons albifrons</i> , Wigeon <i>Anas penelope</i> , Teal <i>Anas crecca</i> , Pochard <i>Aythya ferina</i> , Tufted Duck <i>Aythya fuligula</i> , Shoveler <i>Anas</i>														
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<p><i>clypeata.</i></p> <p>Broadland is a low-lying wetland complex straddling the boundaries between east Norfolk and northern Suffolk in eastern England. The Broads are a series of flooded medieval peat cuttings. They lie within the floodplains of five principal river systems, known as Broadland. The area includes the river valley systems of the Bure, Yare and Waveney and their major tributaries. The distinctive open landscape comprises a complex and interlinked mosaic of wetland habitats including open</p>									
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<p>water, reedbeds, carr woodland, grazing marsh and fen meadow, forming one of the finest marshland complexes in the UK. The differing types of management of the vegetation for reed, sedge and marsh hay, coupled with variations in hydrology and substrate, support an extremely diverse range of plant communities. The area is of international importance for a variety of wintering and breeding raptors and waterbirds associated with extensive lowland marshes. The estuary at the mouth of Broadland is Breydon</p>														
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Water SPA, and the two sites adjoin each other at Halvergate Marshes. Breeding and wintering raptors, and wintering waterbirds spend time on feeding areas outside the SPA boundary.									
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### **3.5 The Broadland Ramsar**

Name of European Site: The Roadland Ramsar											
The Scheme: The Norwich Northern Distributor Road, known as “the NDR” is a dual carriageway all-purpose strategic distributor road, to be classified as the A1270 Principal Road, which would link the A1067 Fakenham Road, near Attlebridge, to the A47 Trunk Road (T) at Postwick. This will be over a length of approximately 20.4 km											
Distance to Proposed Scheme: 1.7 km											
European site features			Likely Effects on Scheme								
			Effect 1: Traffic Noise			Effect 2: Air Quality			In Combination Effects		
			C	O	D	C	O	D	C	O	D
Tundra swan , <i>Cygnus columbianus bewickii</i> ,  Eurasian wigeon , <i>Anas penelope</i> ,  Gadwall , <i>Anas strepera strepera</i> ,  Northern shoveler ,			None	None	N/A	None	None	N/A	None	None	N/A
				Increases of traffic flows along the Acle Straight of 4% in 2017 and 8% in			Increases of traffic flows along the Acle Straight of 4% in 2017				

<p><i>Anas clypeata</i>,          Broadland is a low-lying wetland complex straddling the boundaries between east Norfolk and northern Suffolk. The area includes the river valley systems of the Bure, Yare and Waveney and their major tributaries. The open distinctive landscape comprises a complex and interlinked mosaic of wetland habitats including open water, reedbeds, carr woodland, grazing marsh and fen meadow.</p>		<p>2032. For noise the rise in traffic flows equates to a less than 1db increase in noise levels. This would be imperceptible to bird populations either adjacent to or at a distance from traffic using the A47.</p>			<p>and 8% in 2032. Could give rise to increases in No<sub>x</sub> emissions.          NO<sub>x</sub>: no effects are predicted with the exception of where NO<sub>x</sub> increases are above 2ug/m<sup>3</sup>. this level reduces to below these limits within 10m of the adjacent road, which takes in the</p>				
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<p>The region is important for recreation, tourism, agriculture and wildlife.</p>					<p>verges and margins. Therefore there are no predicted effects on the site local area or on the designated site as a whole.</p>				
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## Appendix A: Natural England

## Appendix B: Location of Designated Sites