

A47 North Tuddenham to Easton Dualling

Scheme Number: TR010038

Volume 6

6.1 Environmental Statement **Chapter 1 - Introduction**

APFP Regulation 5(2)(a)

Planning Act 2008

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

March 2021

Infrastructure Planning

Planning Act 2008

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

The A47 North Tuddenham to Easton
Development Consent Order 202[x]

**ENVIRONMENTAL STATEMENT CHAPTER 1
INTRODUCTION**

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1. Introduction

- 1.1.1. The promoter and applicant of the A47 North Tuddenham to Easton Dualling Scheme (now referred to in this Environmental Statement (ES) as the 'Proposed Scheme') is Highways England, a government company charged with operating, maintaining and improving England's motorways and major A roads.
- 1.1.2. As the Applicant, Highways England is proposing the upgrading of approximately 7.9km of single carriageway on the A47 between North Tuddenham and Easton to dual carriageway and associated works to enable the development to connect into the strategic road network.
- 1.1.3. The Proposed Scheme is an Environmental Impact Assessment (EIA) development for the purposes of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 ("EIA Regulations"). This ES presents the information on likely significant environmental effects of the Proposed Scheme that the Applicant is required to submit in accordance with the EIA Regulations.
- 1.1.4. The general location of the Proposed Scheme is shown in Figure 1.1 (Scheme overview) (TR010038/APP/6.2).

1.2. Purpose of this report

- 1.2.1. EIA can be defined as an assessment of those consequences of a major project which affect the natural, built and social environment. The EIA Regulations require an assessment of the effects of certain public and private projects, which are likely to have significant effects on the environment, before development consent is granted.
- 1.2.2. The EIA Regulations require that the findings of the EIA be reported in the form of an ES. The ES is a key part of the application documents submitted by Highways England in support of the Development Consent Order (DCO) application for the Proposed Scheme.
- 1.2.3. The overall purpose of this ES is to provide the Planning Inspectorate with enough information on the anticipated effects of the Proposed Scheme to enable an informed recommendation to be made to the Secretary of State for Transport.
- 1.2.4. Table 1.1 sets out the structure of the ES along with a summary of what is included in each chapter.

Table 1.1 ES Structure

Chapter	Description
Non-Technical Summary (NTS) (TR010038/APP/6.4)	
Separate document to the ES	Summary of the ES in a non-technical language.
Volume 1: Main Report (TR010038/APP/6.1)	
Chapter 1 Introduction (this chapter)	Provides an overview of the Proposed Scheme, the purpose and structure of the ES, outlines the legislative and policy framework, and provides competent expert evidence.
Chapter 2 The Proposed Scheme	Provides a detailed description of elements assessed in the ES, explains the objectives and need of the Proposed Scheme. Chapter also includes the baseline scenario (which refers to conditions that currently exist) and the proposed construction (including any required demolition), operation and management of the Proposed Scheme.
Chapter 3 Assessment of alternatives	Describes the alternatives considered as part of the design process and methodology for the assessment.
Chapter 4 Environment assessment methodology	Provides a summary of the environmental scoping process undertaken, key stages of consultation and feedback received, general assumptions and limitations and an explanation of the significance criteria.
Chapter 5 Air quality	Identifying and assessing the likely significant environmental effects for each specialist environmental parameter, including an introduction to the topic area, describing the approach and method for identifying and assessing likely significant environmental effects, describing the baseline (i.e. existing) conditions, identifying and assessing likely significant effects, considering mitigation measures and assessing the significance of residual effects.
Chapter 6 Cultural heritage	
Chapter 7 Landscape and visual effects	
Chapter 8 Biodiversity	
Chapter 9 Geology and soils	
Chapter 10 Material assets and waste	
Chapter 11 Noise and vibration	
Chapter 12 Population and human health	
Chapter 13 Road drainage and water environment	
Chapter 14 Climate	
Chapter 15 Cumulative effect assessment	Presents the assessment for combined effects as a result of the Proposed Scheme (the interrelationship between different environmental factors) and cumulative effects from different proposed developments (with the Proposed Scheme being assessed).
Glossary	Abbreviations and definitions used within the ES.

Chapter	Description
Volume 2: Figures (TR010038/APP/6.2)	
To support the corresponding chapters and appendices in Volumes 1 and 3.	
Volume 3: Appendices (TR010038/APP/6.3)	
To support the corresponding chapters in Volume 1.	

1.3. Overview of the Proposed Scheme

- 1.3.1. The Proposed Scheme is one of six projects to improve journeys on the 185km section of the A47 between Peterborough and Great Yarmouth. Together, the proposals will relieve congestion and improve the reliability of journey times for drivers.
- 1.3.2. The proposals include converting sections of single carriageway to dual carriageway and making improvements to junctions across the route. The six schemes are:
- A47 Wansford to Sutton dualling
 - A47 Guyhirn junction improvement
 - A47 North Tuddenham to Easton dualling
 - A47 Blofield to North Burlingham dualling
 - A47 / A11 Thickthorn junction improvement
 - A47 Great Yarmouth junction improvements
- 1.3.3. The section of single carriageway from North Tuddenham to Easton on the A47 is approximately 7.9km long. It acts as a bottleneck, resulting in congestion and leading to longer and unreliable journey times. This section of the A47 also has a poor safety record.
- 1.3.4. If nothing is done to improve capacity and connectivity, these delays are forecast to get worse in future years. In developing the Proposed Scheme, the Applicant aims to address these issues by constructing a high-quality dual carriageway link which is intended to improve the traffic flow, reduce journey times on the route and increase the route safety and resilience. The Proposed Scheme is also intended to support economic growth by making journeys safer and more reliable.
- 1.3.5. The extent of the Proposed Scheme is illustrated in Figure 1.1 (Scheme overview) (**TR010038/APP/6.2**). A detailed description of the Proposed Scheme is provided in Chapter 2 (The Proposed Scheme) (**TR010038/APP/6.1**).
- 1.3.6. Key elements of the Proposed Scheme include:

- 9km of new dual carriageway, running to the south of the existing A47 at Hockering and north of the existing A47 at Honingham
- two new junctions where the A47 passes over the local roads: one where Berrys Lane meets Wood Lane (Wood Lane junction) and one where Blind Lane meets Taverham Road (Norwich Road junction)
- removal of the existing roundabout at Easton to create a free-flowing road
- building four bridges for the A47 to pass over or under: the new Mattishall Lane Link Road, the proposed Wood Lane junction, the River Tud and the proposed Norwich Road junction
- Sandy Lane connecting to the A47 via a new side road providing access to Wood Lane junction
- two new lay-bys on the A47, between Fox Lane and the proposed Wood Lane junction, and police observation points
- closure to through traffic of: Church Lane (East Tuddenham), Berrys Lane, Blind Lane and Church Lane (Easton), north the of A47
- widening of the junction of Rotten Row and Church Lane (East Tuddenham)
- converting sections of the existing A47 for local needs, such as
 - converting to a Class B road north of Honingham, with a new cycle track between the new Dereham Road link road and Honingham roundabout
 - reducing to a single lane in front of St Andrews church, Honingham, with inclusion of passing places, parking places, turning area and security gate
- alterations to existing public rights of way and provision of new segregated routes for walkers and cyclists, including:
 - a new route for walkers and cyclists linking Honingham with St Andrew's Church below the A47 via the proposed Honingham church underpass
 - a new route for walkers and cyclists linking Easton with Lower Easton over the A47 via the proposed Easton footbridge
- new drainage systems, including:

- new outfalls to the River Tud
- dry culverts to maintain overland flow paths
- new attenuation basins, with pollution control devices, to control discharges to local watercourses
- compounds, material storage areas and temporary vehicle parking located within the scheme boundary when construction is taking place
- diverting or installing new utilities infrastructure, such as a high pressure gas pipeline, electricity cables, water pipelines and electronic communications cables
- environmental measures embedded into the Scheme design to reduce the environmental effects and deliver wider benefits, such as noise barriers, low noise road surface on the A47, permanent mammal crossings and new wetland habitats
- temporary closure of access (exit and entry) to Honingham Lane at the junction with Taverham Road, Weston Road and Telegraph Hill until NWL opens.

1.4. Legislative and policy framework

Legislative context and the need for the EIA

- 1.4.1. The Proposed Scheme is defined as a Nationally Significant Infrastructure Project (NSIP), as it consists of the construction of a highway under sections 14(1)(h) and 22(1)(a) of the PA 2008, together with associated development and other ancillary matters. Further detail concerning the Proposed Scheme's qualification as an NSIP can be found in the prescribed form within the Application Form (**TR010038/APP/1.1**) and in the Explanatory Memorandum to the Draft Development Consent Order (**TR010038/APP/3.2**).
- 1.4.2. In accordance with the legislation, a DCO is therefore required to allow the construction and operation of the Proposed Scheme.
- 1.4.3. The Proposed Scheme falls under schedule 2, part 10 Infrastructure Projects (f) Construction of roads of the EIA Regulations. Highways England have determined that EIA is required on the basis that there is a potential for significant effects on the environment.
- 1.4.4. In accordance with Regulation 8(1)(b) of the EIA Regulations, the Applicant notified the Secretary of State for Transport (Secretary of State) in a letter to the

Planning Inspectorate dated 21 February 2020 that an ES presenting the findings of the EIA will be submitted with the DCO application for this project.

- 1.4.5. The Localism Act 2011 appointed the Planning Inspectorate (the Inspectorate) as the agency responsible for operating the DCO process for NSIPs. In its role, the Inspectorate will examine the application for the Proposed Scheme and then will make a recommendation to the Secretary of State who will make the decision on whether to grant or to refuse the DCO.
- 1.4.6. In accordance with section 104(2) of the PA 2008, the Secretary of State is required to have regard to the relevant National Policy Statement (NPS), amongst other matters, when deciding whether or not to grant a DCO. The relevant NPS for the Proposed Scheme is the National Policy Statement for National Networks (NPS NN) which was designated in January 2015.
- 1.4.7. Other matters that the Secretary of State would consider important and relevant include national and local planning policy, including the National Planning Policy Framework (NPPF), published in February 2019.

Planning policy context

National Policy

- 1.4.8. When the DCO application for the Proposed Scheme is to be progressed as an EIA development, an environmental assessment will be undertaken in compliance with national policies and regulations and will also consider whether legal duties and obligations set out within the Road Investment Strategy (RIS) and Highways England Licence would be met.

National Planning Policy Framework

- 1.4.9. The NPPF states that the purpose of the planning system is to contribute to the achievement of sustainable development. Achieving sustainable development means that the planning system has three interdependent overarching objectives; an economic objective, a social objective and an environmental objective. All three need to be explored in mutually supportive ways.
- 1.4.10. The NPPF sets out the Government's planning policies for England and how these are expected to be applied. The overall strategic aims of the NPPF and the NPS NN are consistent, however the NPPF does not contain specific policies for NSIPs and will only be considered to the extent relevant to the project.

National Policy Statement for National Networks

- 1.4.11. The NPS NN sets out the need for, and the Government's policies to deliver development of NSIPs on the national road network in England and also sets out the primary basis for making decisions of development consent for NSIPs in

England. The Government recognises in the Appraisal of Sustainability accompanying the NPS NN that some developments will have some adverse local impacts on noise, emissions, landscape and visual amenity, biodiversity, cultural heritage and water resources. The significance of these effects and the effectiveness of mitigation is uncertain at the strategic and non-locational specific level of the NPS NN. Therefore, whilst applicants should deliver developments in accordance with government policy and in an environmentally sensitive way, including considering opportunities to deliver environmental benefits, it is recognised that some adverse local effects of development may remain.

1.4.12. Outside the NSIP regime, government policy is to bring forward targeted works to address existing environmental problems on the strategic road network (SRN) and improve the performance of the network. This includes:

- reconnecting habitats and ecosystems
- enhancing the settings of historic and cultural heritage features
- respecting and enhancing landscape character
- improving water quality and reducing flood risk
- avoiding significant adverse impacts from noise and vibration
- addressing areas of poor air quality

Road Investment Strategy 2

1.4.13. In April 2020, the Department of Transport (DfT) published the Road Investment Strategy 2 (RIS2) for 2020-25. The RIS2 sets out the list of schemes that are to be developed by Highways England over the period covered by the RIS.

1.4.14. The Applicant, as the strategic highways company and appointed by the Secretary of State, must in exercising its functions and complying with its legal duties and other obligations, act in a manner which it considers best calculated to, among others:

- Minimise the environmental impacts of operating, maintaining and improving its network and seek to protect and enhance the quality of the surrounding environment.
- Conform to the principles of sustainable development.

1.4.15. The performance of the Applicant and the SRN will be assessed against Key Performance Indicators (KPIs), Performance Indicators (PIs) and commitments that will provide additional context to Highways England's performance or help develop future performance measures.

1.4.16. The KPIs for the environment include:

- 7,500 households in Noise Important Areas mitigated using funding from the Environment and Wellbeing designated fund during Road Period 2 (RP2).
- Achieve No Net Loss of biodiversity over the whole of Highways England soft estate by the end of RP2.
- Bring links agreed with the Department for Transport and based on the Pollution Control Mapping model into compliance with legal NO₂ limits in the shortest possible time.
- Reduce Highways England's carbon emissions as a result of electricity consumption, fuel use and other day-to-day operational activities during RP2, to levels defined by baselining and target setting activities in 2020 – 2021.

Highways England policy

Highways England Licence

1.4.17. The Highways England Licence document sets out key requirements which must be complied with by the Licence holder as well as statutory guidance. In exercising its functions and complying with its legal duties and obligations, the Licence holder must act in such a manner which it considers best calculated to:

- Ensure the effective operation of the network (paragraph 5.1 to 5.3).
- Ensure the maintenance, resilience, renewal, and replacement of the network (paragraph 5.4 to 5.5).
- Ensure the improvement, enhancement and long-term development of the network (paragraph 5.6 to 5.8).
- Ensure efficiency and value for money (paragraph 5.12).
- Protect and improve the safety of the network (paragraph 5.15 to 5.16).
- Co-operate with other persons or organisations for the purposes of coordinating day-to-day operations and long-term planning (paragraph 5.17 to 5.22).
- Minimise the environmental impacts of operating, maintaining and improving its network and seek to protect and enhance the quality of the surrounding environment (paragraph 5.23 to 5.24).
- Conform to the principles of sustainable development (paragraph 5.25 to 5.28).
- In complying with section 4.2(g) and its general duty under section 5(2) of the Infrastructure Act 2015 to have regard for the environment, the Licence holder must (paragraph 5.23).
- Ensure that protecting and enhancing the environment is embedded into its business decision-making processes and is considered at all levels of operations (paragraph 5.23 a).
- Ensure the best practicable environmental outcomes across its activities, while working in the context of sustainable development and delivering value for money (paragraph 5.23 b).

- Consider the cumulative environmental impact of its activities across its network and identify holistic approaches to mitigate such impacts and improve environmental performance (paragraph 5.23 c).
- Where appropriate, work with others to develop solutions that can provide increased environmental benefits over those that the Licence holder can achieve alone, where this delivers value for money (paragraph 5.23 d).
- Calculate and consider the carbon impact of road projects and factor carbon into design decisions and seek to minimise carbon emissions and other greenhouse gases from its operations (paragraph 5.23 e).
- Adapt its network to operate in a changing climate, including assessing, managing and mitigating the potential risks posed by climate change to the operation, maintenance and improvement of the network (paragraph 5.23 f).
- Develop approaches to the construction, maintenance and operation of the Licence holder's network that are consistent with the government's plans for a low carbon future (paragraph 5.23 g).
- Take opportunities to influence road users to reduce the greenhouse gas emissions from their journey choices (paragraph 5.23 h).

Highways England Delivery Plan

1.4.18. The Highways England Delivery Plan sets out the Applicant's long-term plans for the modernisation and renewal of the road network over the 5 year period from 2020-2025. It provides a brief outline of what the Applicant has delivered during 2015-2020 and sets out a clear programme of activity for 2020-2025, as well as annual and future commitments. It complements the original Delivery Plan (Highways England Delivery Plan 2015-2020), outlining progress made with this work.

Highways England Operational Metrics Manual

- 1.4.19. KPIs and other performance indicators are set out in the June 2020 Operational Metrics Manual produced in collaboration with DfT and Office of Rail and Road. KPIs for Being environmentally responsible include:
- Noise: 7,500 households benefiting from noise reduction in Noise Important Areas
 - The number of households within mitigation NIAs where noise has been reduced through Highways England designated fund projects
 - Biodiversity: No net loss across all Highways England activities by the end of RP2
 - Deliver no net loss of biodiversity, measured using an industry standard way of measuring biodiversity changes referred to as the biodiversity metric.

- Air quality: Bring links within Highways England control and agreed with DfT into compliance as soon as possible
 - The number of strategic road network links in exceedance of the legal nitrogen dioxide (NO₂) limits as set by the European Union and accepted by the government
- Highways England carbon emissions: Reduce emissions. Target from 2021-22, to be defined in 2020-21.
 - Metric to become operational from 1 April 2021

1.4.20. The following performance indicators (PIs) for being environmentally responsible are as follows:

- Supply chain carbon emissions
 - The carbon footprint associated with Highways England's supply chain and also normalised by the volume of work undertaken.
- Condition of cultural heritage assets
 - The overall condition of the culturally significant assets owned by Highways England
- Water quality
 - The length of watercourse enhanced through the mitigation of medium, high, and very high-risk outfalls as well as through other enhancements such as river retraining / rewilding
- Litter
 - The percentage of the strategic road network where litter is graded at A or B as defined in the Code of practice on litter and refuse 2006.

1.4.21. Through the EIA process, potential effects on ecological habitats and species have been considered and measures have been included within the Proposed Scheme design to avoid, mitigate and enhance biodiversity, refer to Chapter 8 (Biodiversity) (**TR010038/APP/6.1**). These have been developed in a way that furthers the objective of delivering a net biodiversity gain on the SRN by 2040. Avoiding and mitigating poor air quality has been a key consideration in the design development and environmental assessment of the Proposed Scheme, refer to Chapter 5 (Air Quality) (**TR010038/APP/6.1**).

Highways England Designated Funds

1.4.22. A series of ringfenced funds for actions beyond business as usual are available across environmental disciplines, including the designated funds programme. This programme is formed of four funds:

- Safety and congestion
- Environment and wellbeing

- Users and communities
- Innovation and modernisation

1.4.23. The designated funding streams focus on making improvements that make a difference and deliver lasting benefits for road users, the environment and communities across England.

1.5. Competent expert evidence

- 1.5.1. The EIA Regulations require that the ES is prepared by ‘competent experts’ (Regulation 14 (4) (a)). Sweco have undertaken the ES as the competent expert on behalf of the Applicant. Sweco has been awarded the EIA Quality Mark from the Institute of Environmental Management and Assessment (IEMA), demonstrating competency in ES preparation.
- 1.5.2. The EIA has been undertaken by competent experts with the relevant and appropriate experience in their respective topics. A competent expert section within the individual topic chapters has been provided as evidence.
- 1.5.3. The overall EIA lead and competent expert responsible for the ES is a full member of the Institution of Environmental Sciences and a Chartered member of the Landscape Institute.