

A428 Black Cat to Caxton Gibbet improvements

TR010044

Volume 6

6.3 Environmental Statement

Appendix 4.1: Transboundary Effects Screening

Planning Act 2008

Regulation 5(2)(a)

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

26 February 2021

Infrastructure Planning

Planning Act 2008

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

**A428 Black Cat to Caxton Gibbet
improvements
Development Consent Order 202[]**

Appendix 4.1: Transboundary Effects Screening

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Table of contents

Chapter	Pages
1 Transboundary effects screening	1
1.1 Background	1
1.2 Screening of transboundary effects	1
1.3 Summary	6
1.4 References	7

Table of Tables

Table 1-1: Transboundary effects screening matrix.....	1
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1 Transboundary effects screening

1.1 Background

1.1.1 Regulation 32 of *The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017* (Ref 1-1) requires the consideration of any likely significant effects on the environment of another European Economic Association (EEA) State.

1.1.2 Effects on other EEA States are referred to as transboundary effects.

1.1.3 As part of the Environmental Impact Assessment (EIA), a screening exercise has been undertaken to identify the potential for the Scheme to result in transboundary effects using guidance provided in the Planning Inspectorate’s *Advice Note twelve: Transboundary Impacts and Process* (Ref 1-2).

1.2 Screening of transboundary effects

1.2.1 **Table 1-1** presents the consideration of transboundary effects for the Scheme and provides the evidence on which a decision has been based to scope such effects out of consideration in the EIA, as summarised in **Chapter 4, Environmental assessment methodology** of the Environmental Statement [TR010044/APP/6.1].

Table 1-1: Transboundary effects screening matrix

Criteria and relevant consideration	Commentary with regard to the Scheme
Characteristics of the development	
Size of the development Use of natural resources Production of waste Pollution and nuisance Risk of accidents Use of technologies	The Scheme includes the following components: <ol style="list-style-type: none"> a. A new three-level grade separated junction at Black Cat roundabout, with the A1 at the lower level, the new dual carriageway on the upper level and a roundabout between the two at approximately existing ground level. In addition to slip roads a new free flowing link between the A421 eastbound carriageway and the A1 northbound carriageway will also be provided. b. A new grade separated all movements junction will be constructed to the east of the existing Cambridge Road roundabout to provide access to the new dual carriageway and maintain access to the existing A428. c. At the Caxton Gibbet roundabout, a new grade separated all movements junction will be constructed, incorporating the existing roundabout on the south side of the new dual carriageway and a new roundabout on the north side. The new dual carriageway will then tie-in to the existing A428 dual carriageway to the east of the new Caxton Gibbet junction. d. In the vicinity of the new Black Cat junction, direct access onto the A1 from some local side roads and private premises will be closed for safety reasons. A new local road will provide an alternative route.

Criteria and relevant consideration	Commentary with regard to the Scheme
	<p>The existing Roxton Road bridge will be demolished and replaced with a new structure to the west to accommodate the realigned A421.</p> <p>e. New crossings will be constructed to enable the new dual carriageway to cross the River Great Ouse, East Coast Main Line railway, Barford Road, the B1046/Potton Road, Toseland Road and the existing A428 at Eltisley.</p> <p>f. The existing A428 between St Neots and Caxton Gibbet will be de-trunked and retained for local traffic and public transport with maintenance responsibility transferred to the local highway authorities.</p> <p>g. An alternative access will be provided to side roads at Chawston, Wyboston and Eltisley.</p> <p>h. There will be safer routes for walkers, cyclists, and horse riders.</p> <p>In addition to the above, the Scheme also includes the diversion of various utilities, creation of flood compensation, attenuation basins and various access tracks.</p> <p>A detailed description of the Scheme is set out in Chapter 2, The Scheme of the Environmental Statement [TR010044/APP/6.1].</p> <p>The Scheme would be progressed within the administrative boundaries of Bedford Borough Council; Central Bedfordshire Council; Huntingdonshire District Council, and South Cambridgeshire District Council.</p> <p>A review of the characteristics of the Scheme has concluded that:</p> <p>a. Some of the resources required to construct the Scheme are likely to be obtained from the global market, for example steel; however, it is envisaged that most construction materials would be able to be obtained locally within the UK.</p> <p>b. No waste, nuisances or accidents are likely that would extend beyond the border of the UK as a result of construction or operation of the Scheme.</p> <p>c. No novel technologies are proposed that would introduce potential for transboundary effects to occur on other EEA States.</p>
Geographical area	
<p>What is the extent of the area of a likely impact under the jurisdiction of another EEA state?</p>	<p>A review of the geographical area of impact associated with the Scheme has concluded that any environmental effects associated with its construction and operation are unlikely to extend beyond the jurisdiction of the UK, with the exception of potential release of greenhouse gas emissions from vehicles (traffic) in relation to their contribution to climate change.</p>

Criteria and relevant consideration	Commentary with regard to the Scheme
Location of development	
<p>What is the existing use?</p> <p>What is the distance to another EEA state?</p>	<p>A review of the location of the Scheme has concluded that existing land uses are mixed but predominantly agricultural. Some of the land that will be permanently taken by the Scheme is currently occupied by the existing highway network.</p> <p>The location of the Scheme is situated approximately 190km (118 miles) from France and 410km (255 miles) from the Republic of Ireland.</p> <p>The study areas adopted within each of the assessments reported in Chapters 5 – 14 of the Environmental Statement [TR010044/APP/6.1] have been reviewed, and it has been concluded that none of their boundaries would extend into these EEA states.</p>
Cumulative impacts	
<p>Are other major developments close by?</p>	<p>A number of developments have been identified that could interact cumulatively with the Scheme. Details of these developments are presented in the Cumulative Effects Assessment reported in Chapter 15, Summary of cumulative effects of the Environmental Statement [TR010044/APP/6.1].</p> <p>The form and nature of several of these developments are such that they are likely to result in the attraction or reassignment of traffic on the highway network which, in combination with the Scheme, could give rise to cumulative increases in greenhouse gas emissions.</p> <p>No other types of cumulative impacts have been identified that have the potential to result in transboundary effects.</p>
Carrier	
<p>By what means could impacts be spread?</p>	<p>Environmental effects would derive from the physical introduction of new highway infrastructure into the receiving environment, and from vehicles (traffic) travelling on the highway network.</p> <p>Potential effects associated with noise, biodiversity, landscape, flood risk and land use (land take) would be relative to the Scheme and focused within the adopted assessment study areas identified for these topics.</p> <p>Emissions to air (specifically greenhouse gases) derived from vehicles travelling on new and improved sections of the highway network would be spread and dispersed by normal atmospheric processes and conditions. Such emissions have the potential to combine with greenhouse gas emissions associated with the cumulative developments identified above, and with emissions from other developments located within EEA states.</p>

Criteria and relevant consideration	Commentary with regard to the Scheme
Environmental importance	
<p>Are particular environmental values likely to be affected?</p> <p>Capacity of the natural environment</p> <p>Wetlands, coastal zones, mountain and forest areas, nature reserves and parks, Natura 2000 sites, areas where environmental quality standards already exceeded, densely populated areas, landscapes of historical, cultural or archaeological significance</p>	<p>Nature Conservation</p> <p>A review of the geographic location of the Scheme against statutory nature conservation designations has confirmed that:</p> <ol style="list-style-type: none"> There are two international nature conservation sites within 10km (6.2 miles) of the Scheme: Portholme Special Area of Conservation (SAC) located 8.9km (5.5 miles) from the Order Limits; and Eversden and Wimpole Woods SAC located 8.10km (5.03 miles) from the Order Limits. There are two Sites of Special Scientific Interest (SSSI) of national importance within 1km (0.62 miles) of the Scheme: St Neots Common SSSI, located 1km (0.6 miles) from the Order Limits to the north of Wyboston interchange; and Elsworth Wood SSSI, located 0.85km (0.53 miles) from the Order Limits to the north of the existing Caxton Gibbet roundabout. There are no National Nature Reserves or Local Nature Reserves within 1km (0.62 miles) of the Scheme. <p>A Habitats Regulation Assessment screening exercise has been undertaken to determine whether construction, operation or maintenance of the Scheme would result in likely significant effects on European Sites. The findings of the screening exercise are reported in the Habitats Regulations Assessment: No Significant Effects Report [TR010044/APP/6.6], which concludes that there is no likelihood of significant effects on Portholme SAC or Eversden and Wimpole Woods SAC.</p> <p>An additional European Site – Ouse Washes SAC, Special Protection Area and Ramsar located 16.01km (9.45 miles) from the Order Limits – was also considered in the screening exercise, which concluded there would be no likely significant effects from the Scheme on this site.</p> <p>The assessment concluded that no significant effects are likely on St Neots Common SSSI or Elsworth Wood SSSI.</p> <p>Air Quality</p> <p>One Air Quality Management Area (AQMA) has been designated by Huntingdonshire District Council on St Neots' High Street, approximately 1.6km (0.99 miles) from the Order Limits (approximately 5.4km (3.36 miles) north of the existing Black Cat roundabout).</p> <p>A second AQMA has been designated by Central Bedfordshire Council along a section of the A1(M) immediately west of Sandy, located 1.6km (0.99 miles) from the Order Limits (approximately 5km (3.1 miles) south of the existing Black Cat roundabout).</p> <p>Landscape</p>

Criteria and relevant consideration	Commentary with regard to the Scheme
	<p>There is one Registered Historic Park and Garden (Croxton Park) within 1km (0.62 miles) of the Order Limits, located to the south of the existing A428 at Croxton Park.</p> <p>Cultural Heritage</p> <p>There are no World Heritage Sites within 5km (3.1 miles) of the Order Limits.</p> <p>There are 11 Scheduled Monuments within 1km (0.62 miles) of the Order Limits.</p> <p>There are five conservation areas within 1km (0.62 miles) of the Order Limits.</p> <p>One Registered Park and Garden is present within 1km (0.62 miles) of the Order Limits (Croxton Park – Grade II* listed).</p> <p>There are 133 listed buildings located within 1km (0.62 miles) of the Order Limits (comprising nine listed at Grade II* and 124 listed at Grade II).</p>
Extent	
<p>What is the likely extent of the impact?</p>	<p>The only potential transboundary environmental impact is from greenhouse gas emissions, which could contribute to climatic changes on a global scale. Based on a review of the characteristics of the Scheme, it has been concluded that such changes to the existing strategic highway network are unlikely to result in a significant contribution to global climate change.</p>
Magnitude	
<p>What will the likely magnitude of the change in relevant variables relative to the status quo, taking into account the sensitivity of the variable?</p>	<p>Provisional totals of UK territorial greenhouse gas emissions for the year 2019 are estimated to be 435.2 million tonnes carbon dioxide equivalent (MtCO₂e), of which greenhouse gas emissions from UK transport are provisionally estimated to be approximately 119.6 MtCO₂e of this total (Department for Business, Energy & Industrial Strategy (26 March 2020) (Ref 1-3).</p> <p>A review of the Scheme has concluded that there would likely be a negligible contribution to the UK's overall greenhouse gas emissions associated with changes of the type proposed, and accordingly negligible potential to contribute to global climate change when considered against emissions from other EEA States in a transboundary context (and with other identified cumulative developments).</p>
Probability	
<p>What is the degree of probability of the impact? Is the impact likely to occur as a consequence of normal conditions or exceptional</p>	<p>By virtue of its form and scale, it is certain that the Scheme would result in greenhouse gas emissions. Greenhouse gases would principally derive from vehicle exhaust emissions during operation of the Scheme, with smaller emissions from plant, machinery and other vehicles during its construction. Both increases and decreases in air quality (and</p>

Criteria and relevant consideration	Commentary with regard to the Scheme
situations, such as accidents?	greenhouse gas emissions) are likely to occur at different locations as a result of the Scheme's implementation. These changes would occur as a result of normal operating conditions and no changes related to exceptional conditions have been identified.
Duration	
Is the impact likely to be temporary, short-term or long-term? Is the impact likely to relate to the construction, operation or decommissioning phase of the activity?	<p>Greenhouse gas emissions are likely to occur over a long period of time and would be predominantly associated with the operational stage of the Scheme where traffic would travel continuously on both new and improved sections of the highway network.</p> <p>Notwithstanding this, it is expected that improvements in the levels of greenhouse gas emissions from individual vehicles would be achieved in the medium to long term through technological advancements, and the UK's drive to decrease its dependency on carbon-based fuels such as petrol and diesel.</p>
Frequency	
What is likely to be the temporal pattern of the impact?	The temporal pattern of greenhouse gas emissions is likely to be relatively constant, due to the Scheme forming part of the existing highway network and being in constant use.
Reversibility	
Is the impact likely to be reversible or irreversible?	The impact of greenhouse gas emissions is considered irreversible, as the highway improvements are unlikely to be decommissioned within human lifetimes.

1.3 Summary

- 1.3.1 Based on the criteria and findings presented in **Table 1-1**, the screening exercise has concluded no significant transboundary effects would occur on other EEA States as a result of the Scheme.

1.4 References

- Ref 1-1 The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. HMSO (2017).
<http://www.legislation.gov.uk/ukxi/2017/572/contents/made>
- Ref 1-2 Advice Note twelve: Transboundary Impacts and Process. The Planning Inspectorate (2018).
<https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2013/04/Advice-note-12v2.pdf>
- Ref 1-3 2019 UK Greenhouse Gas Emissions, Provisional Figures – Statistical Release: National Statistics. Departments for Business, Energy & Industrial Strategy (2020).
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