

A38 Derby Junctions
TR010022
Volume 6
6.3 Environmental Statement
Appendices
Appendix 15.1: Cumulative Screening
Methodology

Regulation 5(2)(a)

Planning Act 2008

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

April 2019



Infrastructure Planning

Planning Act 2008

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

A38 Derby Junctions Development Consent Order 202[]

6.3 Environmental Statement Appendices Appendix 15.1: Cumulative Screening Methodology

Regulation Number	Regulation 5(2)(a)
Planning Inspectorate Scheme	TR010022
Reference	
Application Document Reference	6.3
Author	A38 Derby Junctions Project Team, Highways
	England

Version	Date	Status of Version
1	April 2019	DCO Application



Table of Contents

1.1	Background	1
1.2	Stage 1: Establish the NSIP ZoI and identify long list of 'other development'	1
1.3	Stage 2: Identify shortlist of 'other development' for Cumulative Effects Assessment (CEA)	
1.4	Stage 3: Information gathering	5
1.5	Stage 4: Assessment	5
1.6	References	5
List c	of Tables	
Table	e 1: Zol Summary	1



Appendix 15.1: Cumulative effects: screening methodology

1.1 Background

- 1.1.1 This appendix provides details of how guidance contained within the Inspectorate's Advice note seventeen (The Planning Inspectorate, 2015) has been applied to the cumulative effects assessment of the Scheme.
- 1.1.2 The search methodology used to populate the long list of 'other developments' presented in Appendix 15.2 [TR010022/APP/6.3] and the inclusion/exclusion criteria that have applied in the shortlisting process, resulting in the shortlist as presented in Appendix 15.3 [TR010022/APP/6.3], are also described.
- 1.2 Stage 1: Establish the NSIP ZoI and identify long list of 'other development'

Zone of Influence (ZoI)

- 1.2.1 The search area for developments to be included in the long list of 'other development' was based upon the maximum ZoI for the Scheme (2km) around the Scheme's Order Limits. This area was extended outwards to 5km specifically in relation to Nationally Significant Infrastructure Projects (NSIPs) and major highway schemes. The ZoI for each of the assessment topics is presented in Table 1.
- 1.2.2 The 2km maximum ZoI reflected the study areas used in the biodiversity assessment of statutory nature conservation designations (see Chapter 8: Biodiversity) [TR010022/APP/6.1].
- 1.2.3 One Zol larger than 2km is considered in the biodiversity assessment. This is 30km for international statutory nature conservation designations for sites containing bats. For the purposes of this assessment, a 30km search area for other developments was deemed to be disproportionately large, due to the improbability of cumulative effects occurring at this distance. Additionally, the Habitats Regulations Assessment (HRA) No Significant Effects Report (NSER) indicates that whilst there are six Special Areas of Conservation (SACs) within 30km of the Scheme, bats are not one of the qualifying interest, and that the Scheme would have no significant effects on any European sites (refer to Appendix 8.2 [TR010022/APP/6.3]).

Table 1: Zol Summary

Environmental Topic	Zone of Influence (ZoI)
Air quality	Construction: 200m Zol from construction activities for construction dust and air emissions.
	Operation: The 'affected roads' define the ZoI (as described in Chapter 5: Air Quality [TR010022/APP/6.1]). As the operational phase traffic data includes traffic associated with other developments, the air impact assessment included within the ES is inherently a cumulative impact assessment and thus does not need to be repeated.

Planning Inspectorate Scheme Ref: TR010022 Application Document Ref: TR010022/APP/6.3

1



Environmental Topic	Zone of Influence (ZoI)
	See Chapter 5: Air Quality [TR010022/APP/6.1] for further information.
Cultural heritage	Construction and Operation: A 1km Zol, which is the maximum extent used within the cultural heritage assessment. This Zol is divided into the following:
	1km Zol for designated assets.
	500m Zol for non-designated assets.
	The 1km ZoI is in accordance with the guidance on the Zone of Theoretical Visibility (ZTV) in Design Manual for Roads and Bridges (DMRB) Volume 11 Section 3 Part 5 (Annex III) (Highways England, 1993).
	See Chapter 6: Cultural Heritage [TR010022/APP/6.1] for more details.
Landscape and visual effects	Construction and Operation: 1km ZoI for landscape and visual impacts. The defined ZoI is consistent with the study areas as defined for the landscape and visual impact assessment. See Chapter 7: Landscape and Visual [TR010022/APP/6.1] for more details. Beyond this, any other development in combination with the Scheme would be unlikely to give rise to any significant effects on landscape or visual receptors due to the distance reducing the perceived scale and massing of the proposed built elements and associated operational elements (i.e. the traffic moving along the road); and the screening from intervening landform and vegetation.
Biodiversity	Construction and Operation : A 2km ZoI in-line with the desktop study which has been conducted for national statutory and non-statutory nature conservation designations.
	The defined ZoI is consistent with the study areas as defined for the biodiversity impact assessment - see Chapter 8: Biodiversity [TR010022/APP/6.1].
Noise and vibration	Construction: 1km ZoI around construction activities.
	Operation: As the operational phase traffic data includes traffic associated with other developments, the noise and vibration impact assessment included within the ES is inherently a cumulative impact assessment and thus does not need to be repeated. See Chapter 9: Noise and Vibration [TR010022/APP/6.1].
Geology and soils	Construction and Operation: Zol covers all locations where physical works and ground disturbance would take place, plus a 500m buffer.
	The defined ZoI is consistent with the study areas as detailed in Chapter 10: Geology and Soils [TR010022/APP/6.1].
Materials assets and waste	Construction: The ZoI comprises the Scheme boundary and the region within which waste management facilities are located and from where construction materials may be sourced.
	Operation: Operational phase waste management issues have been scoped out of the assessment.
	The defined ZoI is consistent with the study areas as detailed in Chapter 11: Material Assets and Waste [TR010022/APP/6.1].



Environmental Topic	Zone of Influence (ZoI)
People and communities	Construction and Operation: The ZoI extends to a maximum distance of 500m from the Scheme.
	The defined Zol is consistent with the study areas as detailed in Chapter 12: People and Communities [TR010022/APP/6.1].
Road drainage and the water environment	Construction and Operation: 1km ZoI for waterbodies (waterbodies located outside the ZoI, but immediately within its surrounds, have been included where it appears that there is hydraulic connectivity to features within the ZoI and the possibility that they could be significantly affected) and flood risk. For groundwater bodies, the ZoI is the potential zone of impact.
	The defined Zols are consistent with the study areas as defined for the water environment impact assessment – see Chapter 13: Road Drainage and the Water Environment [TR010022/APP/6.1].

Application search

- 1.2.4 A search of planning applications and relevant development plan documents was conducted, and developments which met the criteria below were included on a long list of 'other development'. Developments incorporated into the Scheme's traffic model uncertainty log were also taken into consideration (refer to the Transport Assessment Report [TR010022/APP/7.3]).
- 1.2.5 The selection criteria for inclusion in the long list were as follows:
 - i. All planning applications within 100m of the Scheme boundary.
 - ii. Planning applications considered to be 'major developments' within 2km of the Scheme boundary which included:
 - Employment proposals of 1,000m² or more.
 - Residential proposals with 10 or more houses or, where the number of houses is not known, a site area of 0.5ha or more.
 - Minerals or waste sites with an area of 1ha or more.
 - Transport infrastructure proposals with an area of 1ha or more.
- 1.2.6 A search was conducted for all applicable applications submitted between 1st January 2013 and the 31 December 2018, using the planning application search functions on Derby City Council (DCiC), Erewash Borough Council (EBC), South Derbyshire District Council and Amber Valley Borough Council websites. A search was also conducted using the Planning Inspectorate's website and the Highways England improvements and major road projects website. This search indicated that there are no major road projects within 5km of the Scheme. However, there are two NSIPs within 5km of the Scheme as follows:

٠

¹ as defined in the in the Town and Country Planning (Development Management Procedure) (England) Order 2010 (TCPO)



- Gas Transporter Pipe-lines: Willington C Gas Pipeline by RWE npower.
- Rail Freight Interchanges: East Midlands Intermodal Park by Goodman Real Estate (UK) Limited.
- 1.2.7 Each identified planning application was placed on the long list and then reviewed to determine the current status of each development, to identify whether the development had been implemented (completed), was under construction, or if the consent had expired.
- 1.2.8 Developments which met the inclusion criteria detailed in para. 1.2.5 in this appendix, where consent had not expired, and the development had not been completed, were added to the long list. Where developments have been completed, they are considered within the baseline against which the effects of the Scheme have been assessed.
- 1.3 Stage 2: Identify shortlist of 'other development' for Cumulative Effects Assessment (CEA)
- 1.3.1 The Inspectorate's Advice note seventeen states:
 - "In order to ensure the CEA is proportionate, it may be appropriate for applicants to apply threshold criteria to assist in deciding whether to include or exclude 'other development' that falls within the proposed NSIP's ZoI from further assessment."
- 1.3.2 In determining which of the developments should be shortlisted for consideration in the cumulative effects assessment, the following threshold criteria were applied.

Availability of environmental information

- 1.3.3 In order to allow a meaningful cumulative assessment to be conducted, a minimum level of information was considered necessary; this was taken to be an environmental scoping report, Environmental Statement or similar environmental report(s).
- 1.3.4 Where available, information on construction schedules, ZoI and other environmental information was collated, and each item was assigned to a tier of certainty in accordance with the Inspectorate's Advice note seventeen. Tier 1 developments are considered to be the most certain of progressing, whilst Tier 3 developments are the least certain.
- 1.3.5 Where a sufficient amount of environmental information was available to allow a meaningful cumulative assessment to be conducted, and the development was considered to have enough certainty to justify its inclusion in the assessment, then the development was added to the short list.



1.4 Stage 3: Information gathering

- 1.4.1 To inform the cumulative effects assessment, the following environmental information was obtained (where available) for each of the shortlisted developments:
 - i. The location and boundary for the development.
 - ii. Design information and elevation drawings.
 - iii. The possibility of temporal overlap between different phases of the development and the Scheme.
 - iv. The construction, development and/or decommissioning programme.
 - v. The environmental baseline and details of any potential or likely environmental effects.
 - vi. Proposed environmental mitigation measures.
 - vii. The Zol for each environmental topic.
- 1.4.2 This information was compiled from the local authority websites as applicable.

1.5 Stage 4: Assessment

- 1.5.1 Developments which met the inclusion criteria set out in the steps above were included in the cumulative effects assessment.
- 1.5.2 The cumulative assessment has been completed in general accordance with the guidance in the Inspectorate's Advice note seventeen. See Chapter 15: Assessment of Cumulative Effects for details [TR0100227/APP/6.1].

1.6 References

Highways England (1993 to date). Design Manual for Roads and Bridges, Volume 11.

The Stationary Office (2010). Town and Country Planning (Development Management Procedure) (England) Order 2010.

Improvements and major road projects, find a project. Highways England (2018). Available at: https://highwaysengland.co.uk/roads/

The Planning Inspectorate (2015). Advice note seventeen: Cumulative effects assessment relevant to nationally significant infrastructure projects.

The Planning Inspectorate (2018) National Infrastructure Planning, project application search. Available at:

https://infrastructure.planninginspectorate.gov.uk/

The Stationary Office (2010) Town and Country Planning (Development Management Procedure) (England) Order 2010.