M5 Junction 10 Improvements Scheme

Environmental Statement

Chapter 1 - Introduction

TR010063 - APP 6.2

Regulation 5(2)(a)

Planning Act 2008

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



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Infrastructure Planning Planning Act 2008

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

M5 Junction 10 Improvement Scheme

Development Consent Order 202[x]

6.2 Environmental Statement: Chapter 1 - Introduction

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Document accessibility

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Glossary

The glossary for the Environmental Statement has been produced as a separate document Appendix 1.1 (Application document TR010063/ - APP/ 6.15).



Non-technical summary

The non-technical summary (NTS) of this Environmental Statement (ES) has been produced as a separate document (Application document TR010063 – APP 6.1).

The NTS provides a non-technical summary of the information in the main ES for the M5 Junction 10 Improvements Scheme (the "Scheme"), setting out a topic by topic summary of the environmental assessment undertaken for the Scheme.



1. Introduction

1.1. Scheme background

- 1.1.1. This Environmental Statement (ES) has been prepared to support the application by Gloucestershire County Council (GCC) for a development consent order (DCO) to authorise the construction of the M5 Junction 10 Improvements Scheme (the "Scheme").
- 1.1.2. Gloucestershire faces significant challenges to achieve its vision for economic growth. The Joint Core Strategy (JCS) is a partnership between Gloucester City Council, Cheltenham Borough Council (CBC) and Tewkesbury Borough Council (TBC) which sets out a strategic planning framework for the three areas. The Adopted JCS 2011-2031 is a coordinated strategic development plan, adopted in December 2017, which shows how the region will develop and includes a shared spatial vision targeting 35,175 new homes and 39,500 new jobs by 2031.
- 1.1.3. Major development of new housing (c.9,000 homes) and employment land is proposed in the JCS in strategic and safeguarded allocations to the west and north-west of Cheltenham, these being: West Cheltenham (Golden Valley); North West Cheltenham (Elms Park); and safeguard land to the west and the north-west of Cheltenham (all shown in Figure 1-1). The West Cheltenham development, in turn, is linked to wider economic investment, including a government supported cyber business park (Cyber Central UK) adjacent to the Government Communications Headquarters (GCHQ) site in west Cheltenham.
- 1.1.4. The existing M5 Junction 10 only provides access and egress to and from the north, with no connectivity to M5 south; this causes existing traffic to cross Cheltenham through various routes to access and leave the M5 from the south using other M5 junctions. This contributes significantly to existing traffic flows across Cheltenham, with significant congestion at peak times. To unlock the housing and job opportunities, a highway network is needed that has the capacity to accommodate the increased traffic it will generate, within a sustainable transport context.
- 1.1.5. Upgrading M5 Junction 10 to an all movements junction has been identified as a key infrastructure requirement to enable the housing and economic development proposed by the JCS and supported in the Gloucestershire Local Enterprise Partnership's (GFirst LEP) Strategic Economic Plan and the transport network sought by GCC (Host Authority) in the adopted Gloucestershire Local Transport Plan. Improvements to M5 J10 are critical to maintaining the safe and efficient operation of the junction; and enabling the planned development and economic growth. A bid was submitted in March 2019 to Homes England to the Housing Infrastructure Fund (HIF), wherein an investment case was made for the following infrastructure improvements. Funding was successfully awarded by Homes England in March 2020 for:
 - Element 1: Improvements to Junction 10 on the M5 and a new road linking Junction 10 to west Cheltenham.
 - Element 2: A38/A4019 Junction Improvements at Coombe Hill.
 - Element 3: A4019 widening, east of Junction 10.
 - Element 4: An upgrade to Arle Court Park and Ride.
- 1.1.6. Elements 1 and 3 comprise the M5 Junction 10 Improvements Scheme (the Scheme). The upgrade to Arle Court Park and Ride (now known as the Arle Court Transport Hub) (Element 4) and the junction improvements at Coombe Hill (Element 2) were included as part of the package of improvements funded by Homes England. As they do not form part of the proposed improvement of M5 Junction 10, and are located some distance from the junction, GCC (the Applicant for the Scheme) has decided to take these two elements forward as separate packages of work in order to accelerate the programme for these elements.
- 1.1.7. This ES forms part of an application for a Development Consent Order (DCO) under S.22 of the Planning Act 2008 ("the Act") for the alteration of M5 Junction 10, consisting of a

new all-movements motorway junction; a new West Cheltenham Link Road (the Link Road from the A4019 to the B4634 (Old Gloucester Road)¹), and the widening of the A4019 (Tewkesbury Road)² east of the junction to the Gallagher Retail Park Junction. A small section of the A4019 will be realigned to the west of the junction.

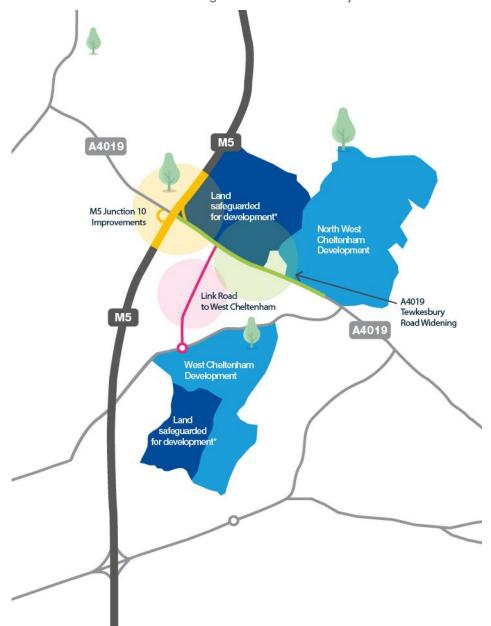


Figure 1-1 - Location of the Scheme elements (M5 Junction 10 Improvements, A4019 Widening, and the Link Road to West Cheltenham), the allocated land at West and North-west Cheltenham (light blue areas on the figure), and the safeguarded land areas at north-west and west Cheltenham (dark blue areas on the figure). (* Safeguarded land is land which has been identified for development in the future and is protected from conflicting development).

1.2. The Applicant

1.2.1. The Applicant for the Scheme is GCC's Strategic Road Network Major Projects Team. The application includes improvements works to the strategic road network controlled by National Highways as well as improvement works to the local road network managed by GCC's Highways Authority. If approved, the DCO powers will be granted to GCC as the Applicant for the Scheme.

¹ B4634 Old Gloucester Road referred to subsequently as the 'B4634'.

² A4019 Tewkesbury Road referred to subsequently as the 'A4019'



1.3. The designer

1.3.1. AtkinsRéalis Limited has been appointed as the designer under GCC's highways framework to undertake the Preliminary Design of the Scheme. This includes responsibility for the Environmental Impact Assessment (EIA) and the preparation of this ES. The preliminary design of the Scheme is the design developed from that presented at the statutory consultation (December 2021 – February 2022), and incorporating feedback received from that consultation, and the further targeted consultation undertaken (August – September 2022, December 2022 – February 2023, and May – June 2023). The development of the preliminary design, to produce the detailed design for the Scheme will be undertaken after the granting of the DCO.

1.4. Need for an Environmental Impact Assessment (EIA)

- 1.4.1. The Act defines what constitutes a Nationally Significant Infrastructure Project (NSIP). Section 22 (4) relates to construction or alteration of highways. As part of the Scheme involves the alteration of Junction 10 of the M5, the threshold to qualify as a NSIP where a scheme involves an alteration to a motorway is defined as 15ha or more of land required for or in connection with the alteration. The element of the Scheme relating to motorway alteration requires approximately 54 ha of land. Therefore, the Scheme qualifies as a NSIP and requires a Development Consent Order (DCO).
- 1.4.2. The Scheme is also categorised as Schedule 2 development that is likely to have a significant effect to the environment, under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 ("the EIA Regulations 2017"), paragraph 10(f) construction of roads, and therefore requires an EIA to be undertaken. This Environment Statement (ES) reports the results of the EIA and has been submitted as part of the DCO application.

1.5. Purpose and structure of the Environmental Statement (ES)

- 1.5.1. The purpose of the ES (and the EIA process that underlies it) is to protect the environment by ensuring that the Examining Authority and the Secretary of State, when deciding whether to recommend consent for a project which is likely to have significant effects on the environment, does so in the full knowledge of the likely significant effects, and takes environmental information into account in the decision-making process.
- 1.5.2. The EIA process that has been undertaken is reported in this ES, which forms part of the DCO application by the Applicant for the Scheme. The ES identifies the likely significant environmental effects of the Scheme (both positive and negative), the appropriate measures to avoid or reduce such effects and the alternatives considered, and an assessment of the significance of the effects identified. The ES has been produced in accordance with the requirements set out within the EIA Regulations 2017.
- 1.5.3. The ES produced for the Scheme comprises the following documents:
 - Environmental Statement Non-Technical Summary (NTS) (Application document TR010063 APP 6.1).
 - Environmental Statement Chapters 1-4 (Application document TR010063 APP 6.2) providing an introduction and the need for the Scheme; the requirement for an EIA; a description of the Scheme; a summary of the mitigation measures embedded in the design to avoid or reduce likely significant effects; details of the alternatives considered; the approach to EIA; a statement on competence of the experts who have carried out the EIA; and a summary of consultation undertaken and the main topics of concern and how these have been considered.
 - Environmental Statement Chapters 5-15 (Application document TR010063 APP 6.3 to 6.13) covering the environmental topics that are required to be assessed under Regulation 5(2) of the EIA Regulations 2017 and encompassing: air quality, noise and vibration, biodiversity, road drainage and the water environment, landscape and visual, geology and soils, cultural heritage, materials and waste,



population and human health (P&HH), climate and cumulative effects. Produced as separate documents for each chapter, with the larger appendices for each chapters produced as separate documents themselves.

- 1.5.4. For each environmental topic, the ES:
 - Describes the study area and the existing baseline environment, based on the data collected.
 - Describes the methodology used in the assessment, and any assumptions made.
 - Provides an assessment of the likely significant environmental impacts of the Scheme based on the information presented.
 - Describes the mitigation measures that have been incorporated into the design or will be incorporated at the construction stage or as part of future maintenance requirements (including future monitoring requirements), so as to avoid, reduce/mitigate or offset the identified environmental impact.
- 1.5.5. The preliminary design stage on which the assessment in this ES is made is referred to as the Design Fix 3 (DF3) stage. The DF3 design has built on the Design Fix 2 (DF2) preliminary design that was presented at the statutory consultation (December 2021 February 2022) and sets out the extents of the key features of the Scheme that affect the assessment. The DF2 design was developed from the DF1 Operational Concept design confirmed at the end of the Scheme's options development and selection phase and was confirmed at the Preferred Route Announcement (PRA) (June 2021). The environmental assessments undertaken at the DF1 and DF2 stages are presented in the Preliminary Environmental Assessment of Options Report (PEAOR), and the Preliminary Environmental Information Report (PEIR) respectively. The development of the preliminary design, to produce the detailed design for the Scheme will be undertaken after the granting of the DCO.
- 1.5.6. Each of the design fix stages have included a consideration of initial EIA findings, incorporating appropriate measures to avoid or reduce likely significant effects; and have also incorporated design refinement where relevant arising from consultation.

1.6. Legislative and policy framework

Legislation framework

- 1.6.1. The overriding legislative framework requiring an EIA is described above in Section 1.4. The required contents of the ES are described in Section 1.5.
- 1.6.2. All relevant legislation for each environmental topic is referenced in the relevant topic chapter of the ES (Chapters 5 to 15).

Policy framework

- 1.6.3. Section 104(2)(a) of the Act, requires the Secretary of State to have regard to the relevant National Policy Statement (NPS), amongst other matters, when determining the DCO application. The relevant NPS for the Scheme is the National Policy Statement for National Networks 2014 (NPS NN, 2014). Chapters 5 to 15 of the ES include the relevant assessment paragraphs of the NPS NN, where relevant to the topic chapters, and the overall assessment of the Scheme's accordance with the NPS NN can be found in the Planning Statement and Schedule of Accordance with National Policy Statement (Application document TR010063 APP 7.1).
- 1.6.4. Section 104(3) of the Act requires the Secretary of State to decide the application in accordance with any relevant national policy statement, except to the extent that certain considerations may apply.
- 1.6.5. As the Scheme involves changes to M5 Junction 10 which is part of National Highways (NH) Strategic Road Network, then the Scheme has also taken account of NH's policies, in particular the Road Investment Strategy 2 (2020-2025) and National Highways Strategic Business Plan (2020-2025). As NH is not the Applicant for the Scheme, then these policies are referenced here with regard to the overall policy framework applicable to the Scheme, but have not been addressed further within each of the ES Chapters 5 to 15:



- Road Investment Strategy 2 (2020-2025) Promotes a safer network, more reliable, and more sensitive to the places through which it runs. Strong focus on the differing needs of road users and adoption of new working practices and technologies including network users experiencing smoother, more consistent journeys and use of green infrastructure and good design, so users and residents alongside the network experience less noise, light and air pollution.
- National Highways: Strategic Business Plan (2020-2025) sets out NH's response
 to Government's second Road Investment Strategy. It presents the careful
 balancing between maintaining and operating the Strategic Road Network safely,
 and providing new capacity where it is needed.

1.7. Consultation overview

- 1.7.1. The Act requires GCC to undertake consultation on the Scheme before submitting its DCO application. Full details of the consultation process that has been undertaken are provided in the Consultation report (Application document TR010063 APP 5.1 and TR010063 APP 5.2), which is included in the DCO application. The consultation report sets out GCC's approach to stakeholder engagement and public consultation on the Scheme and explains how GCC has complied with the pre-application consultation requirements set out in the Act, the Infrastructure Planning (Application: Prescribed Forms and Procedure) Regulations 2009 and the Infrastructure Planning (Environment Impact Assessment) Regulations 2017.
- 1.7.2. Pre-application consultation with key stakeholders and the local community has been undertaken for the Scheme to provide opportunities for interested parties to comment on the proposals while they are at a formative stage, allowing for potential issues to be taken into account and, where necessary, for issues to be addressed before the application was submitted for examination.
- 1.7.3. This section of the ES summarises the consultation that has been undertaken, which includes the following:
 - Non-statutory consultation, that has informed the options development and selection process.
 - Statutory consultation, in accordance with the requirements of the Act.
 - Targeted consultation with prescribed consultees and affected landowners on design changes.

Non-statutory consultation on options

- 1.7.4. A six-week non-statutory consultation was undertaken between 14 October and 25 November 2020.
- 1.7.5. Three options were presented at this consultation for M5 Junction 10 (Option 2, Option 2A and Option 2B). These three options differed only in the location of the new gyratory roundabout for Junction 10, relative to the existing Piffs Elm overbridge (carrying the A4019 over the M5). Each option included the same proposals for the new West Cheltenham Link Road and the widening of the A4019.
- 1.7.6. The aim of the consultation was to identify a preferred option for the new M5 Junction 10 design and a new Link Road to West Cheltenham and to ensure that the proposed improvements along the A4019 work for the local community and those who use the road network.
- 1.7.7. The consultation used a range of methods and approaches including letters to interested parties, leaflets, posters, press releases to newspapers and social media. A dedicated consultation website was developed where members of the public and stakeholders could view consultation documents and submit feedback online using a consultation survey.
- 1.7.8. Due to the COVID-19 pandemic and social distancing rules that were in place at the time of the consultation, no public or face-to-face events were held.



- 1.7.9. Over 400 people and organisations responded to the consultation. A total of 440 survey responses were received during the consultation period (425 online and 15 hardcopies), supplemented by 36 written responses.
- 1.7.10. Key findings from the consultation showed:
 - More than 80% of consultation survey respondents agreed or strongly agreed there
 was a need for the M5 Junction 10 Improvements Scheme.
 - 37% supported Option 2 over Option 2A (28%) and Option 2B (6%). Option 2 involves upgrading the existing junction with a grade separated roundabout centred on the existing junction, rather than offsetting the new junction to the north (Option 2A) or to the south (Option 2B).
 - Respondents also gave their views on specific elements of the design including the alignment and width of the proposed Link Road, pedestrian, cycling and horseriding facilities.
 - A number of comments were also received on environmental issues including ecology, pollution, noise and light impacts as well as the impact of exhaust emissions on climate change and carbon emissions.
- 1.7.11. The findings from the consultation helped to contribute to the Scheme's Preferred Route Announcement (PRA) (June 2021) and to shape the preliminary design for the Scheme.
- 1.7.12. Following this consultation, Option 2 was taken forward as the single option for the Scheme.

Environment scoping

- 1.7.13. As part of the planning process, GCC submitted a scoping request to the Planning Inspectorate (PINS), asking for its written opinion as to the scope and level of detail required to be produced for the ES. The scoping request included an Environmental Scoping Report (published on the PINS website in July 2021) setting out sufficient information on which PINS could base their Scoping Opinion. PINS then consulted with the relevant consultation bodies as defined in the EIA Regulations (2017).
- 1.7.14. A Scoping Opinion was received from PINS in August 2021 based on feedback from statutory consultation bodies. A response from the Applicant to the Scoping Opinion comments from PINS is included in Appendix 1.2 (Application document TR010063 APP 6.15) to this ES. Detailed feedback from the statutory consultation bodies included in the Scoping Opinion from PINS has been considered as part of the Preliminary Design Stage and addressed in this ES.

Statutory consultation on design

- 1.7.15. A statutory consultation on the DF2 design was undertaken between the 8 December 2021 and the 16 February 2022, with prescribed consultees, local authorities, persons with an interest in land (PwIL), and the local community. As well as seeking consultees' views, preferences and ideas on the Scheme's design, feedback was also sought on the PEIR.
- 1.7.16. Responses on environmental matters were received from the Environment Agency, Historic England, Natural England, National Highways, the UK Health Security Agency, GCC (Host Authority), Gloucester City Council and a combined response from Cheltenham Borough Council and Tewkesbury Borough Council local authorities.
- 1.7.17. Following the consultation, the Applicant reviewed all comments and suggestions received from the consultees in relation to the DF2 Scheme design and the information presented in the PEIR. Changes were subsequently made to the Scheme design, including considerations to avoid, reduce, mitigate and improve where possible the impact of the Scheme on the local environment. The changes made are summarised in Section 3.9 of Chapter 3 Assessment of Alternatives (Application document TR010063 APP 6.2).
- 1.7.18. Following the statutory consultation, the Applicant also undertook further environmental assessments. These included additional river and ecological surveys to support the development of the Scheme design.



Targeted consultation

1.7.19. Three rounds of targeted consultation were undertaken, between the 8 August and the 5 September 2022 from the 21 December 2022 and the 18 February 2023, and from the 29 May to 27 June 2023 to cover changes in the design since the statutory consultation, with information provided to prescribed consultees³, affected landowners, and to the informal Traveller site. A face-to-face information share session was held on the 8 September 2022, and the 7 June 2023 to provide information to local residents and affected landowners.

1.8. Competent experts

- 1.8.1. In accordance with the EIA Regulations, the coordination of the environmental assessment process and inputs into each environmental topic area have been undertaken by a team of competent and qualified specialists. These specialists are working in close collaboration with the design engineers, responsible for the design of the Scheme, as part of an iterative design, consultation and assessment process. This process maximises the opportunity to avoid or reduce adverse environmental effects at source, and to identify mitigation measures to address those effects that cannot be avoided or reduced at source.
- 1.8.2. Further detail on the specialist experts can be found in the relevant topic chapters. The overall EIA coordination has been undertaken by competent and qualified experts working in close collaboration with the team of specialists and the design engineers:
 - An EIA coordinator who is a qualified landscape consultant (BA(Hons) DipLA) and holds chartered membership of the Landscape Institute (CMLI) with over 30 years of knowledge and experience of EIA and environmental coordination.
 - An environmental lead who is a qualified environmental consultant (BSc(Hons) PhD) with over 15 years of knowledge and experience of environmental coordination.

Planning Inspectorate Scheme Reference: TR010063 Application Document Reference: TR010063/APP/6.2

³ The information was only provided to those prescribed consultees where the design change altered an aspect of the Scheme that was within their remit.

Appendices



Appendix 1.1 – Glossary

Appendix 1.1 – The glossary for the ES is provided as a separate document (Application document TR010063 – APP 6.15).



Appendix 1.2 – Scoping Opinion Responses

Appendix 1.2 – Scoping Opinion Responses is provided as a separate document (Application document TR010063 – APP 6.15).



Appendix 1.3 – Scheme figures

Appendix 1.3 – Scheme figures is provided as a separate document (Application document TR010063 – APP 6.15).



Appendix 1.4 – Major accidents and disasters assessment

Appendix 1.4 – The major accidents and disasters assessment is provided as a separate document (Application document TR010063 – APP 6.15).

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