Crossrail
Environmental Statement
Volume 1

Project description • The environmental impact assessment process
The need for Crossrail • Planning policy context
Route development and alternatives
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Chapter 1

Introduction
1.1 Background

Crossrail - a General Introduction

1.1.1 Crossrail is a major new cross-London rail link project that has been developed to serve London and the southeast of England. Crossrail will support and maintain the status of London as a World City by providing a world class transport system. The project includes the construction of a twin-bore tunnel on a west-east alignment under central London and the upgrading of existing National Rail lines to the east and west of central London. The Crossrail route is shown in Figure 1.1.

1.1.2 The project will enable the introduction of a range of new and improved rail journeys into and through London. It includes the construction of seven central area stations, providing interchange with London Underground, National Rail and London bus services, and the upgrading or renewal of existing stations outside central London. Crossrail will provide fast, efficient and convenient rail access to the West End and the City by linking existing routes from Shenfield and Abbey Wood in the east with Maidenhead and Heathrow in the west.

1.1.3 Crossrail will be a significant addition to the transport infrastructure of London and the southeast of England. It will deliver improved services for rail users through the relief of crowding, faster journeys and the provision of a range of new direct journey opportunities. The project will also have wider social and economic benefits for London and the southeast of England.

1.1.4 Powers are being sought by means of a hybrid Bill (referred to as “the Bill”) promoted by the Secretary of State for Transport to construct the Crossrail project and operate the railway. In accordance with the provisions of the relevant parliamentary procedures, the Bill will be accompanied, on deposit, by an Environmental Statement (ES). This document, consisting of a number of volumes, constitutes the ES and will begin the process of consultation the results of which, together with the ES and any responses from the Secretary of State, combine to create an Environmental Impact Assessment (EIA) of the project. EIA is used to refer to the process of Environmental Impact Assessment, including consultation responses, whereas ES refers to this document produced on behalf of the Secretary of State. This ES is also accompanied by a non-technical summary.
Figure 1.1 Overview of Crossrail Route

[Map of the Crossrail Route showing stations and surrounding areas.]
The Objectives of Crossrail

1.1.5 Crossrail’s three key objectives are:

• to support the development of London as a World City, and its role as the financial centre of Europe and the UK;
• to support the economic growth of London and its regeneration areas by tackling congestion and the lack of capacity on the existing rail network; and
• to improve rail access into and within London.

1.1.6 Crossrail will achieve these objectives by addressing problems of inadequate capacity on the National Rail and London Underground networks, by improving accessibility to regeneration areas, and by providing transport capacity for the growth expected for London.

Cross London Rail Links Limited

1.1.7 Cross London Rail Links Limited (CLRL) was set up in 2001 to undertake the necessary feasibility, design and assessment work to support an application for powers to authorise the Crossrail project. CLRL was established as a joint venture company owned by Transport for London and the Strategic Rail Authority (SRA). Following the rail review commissioned by the Secretary of State for Transport in January 2004, the role previously taken by the SRA was assumed by the Secretary of State for Transport. At the time of deposit of the ES, Transport for London and the Secretary of State for Transport are the CLRL shareholders. It is proposed in the Bill that the Government will nominate one or more organisations (known as ‘the nominated undertaker’) to take the project forward once consent has been received through Royal Assent to the Bill. Until any such nomination is made, the Secretary of State himself will have the powers of the nominated undertaker.

1.2 Application for Powers

Background

1.2.1 In July 2004, the Secretary of State announced his intention that appropriate powers be sought for Crossrail through a Bill to be submitted to Parliament “at the earliest opportunity”.

1.2.2 The Government is therefore promoting the Bill, which will seek powers for the construction and operation of the Crossrail project.
The Hybrid Bill Process

1.2.3 The Bill seeks a range of powers to build and operate Crossrail. Amongst other matters, the Bill, if enacted, will have the effect of:

- conferring the right to construct and maintain Crossrail and the other associated and enabling works that are summarised in Chapter 2 and detailed in Chapters 8 to 11 of this ES;
- granting deemed planning permission for the construction of Crossrail and the other associated and enabling works;
- removing the need for listed building consent under Section 8 of the Planning (Listed Building and Conservation Areas) Act 1990, for the demolition, alteration or extension of the listed buildings specified in the Bill where this is necessary to construct Crossrail and the other associated and enabling works;
- removing the need to obtain conservation area consent under Section 74 of the Planning (Listed Building and Conservation Areas) Act 1990, for the demolition of the buildings and other structures specified in the Bill within designated conservation areas where this is necessary to construct Crossrail and the other associated and enabling works;
- conferring powers of compulsory acquisition or temporary possession of the land needed to construct Crossrail and the other associated and enabling works;
- authorising the stopping up or closure of highways and other public thoroughfares both permanently and temporarily, and the alteration of highways;
- enabling rights to use certain rail facilities to be taken or varied for the purposes of providing Crossrail services;
- authorising interference with navigable waterways; and
- conferring other powers required in connection with the construction and operation of Crossrail and the other associated and enabling works.

1.2.4 The provisions of the Bill deem planning permission to be granted for the authorised works, and this permission is deemed subject to conditions requiring the approval of the local planning authority for certain matters of detail. The extent of matters subject to approval under these conditions will depend on whether the local planning authority is a ‘qualifying authority’, that is, it has given an undertaking to the Secretary of State about the way in which it will handle applications for approval of details. For qualifying authorities, the matters subject to approval will include certain construction arrangements. Where works affect highways, the Bill also provides for certain matters to be subject to the approval of the highway authority.
The Role of the Environmental Statement

1.2.5 The parliamentary procedures for the submission of hybrid Bills are contained in the Standing Orders of each House of Parliament relating to private business. In order to obtain exemption from carrying out EIA at a later stage, Article 1(5) of the EIA Directive (85/337/EEC) requires that the objectives of the Directive, including that of supplying information, are achieved through the legislative process. Standing Order 27A accordingly requires that when a Bill which authorises the carrying out of works is submitted for approval through the parliamentary process, it shall be accompanied by an ES containing the information referred to in Part II of Schedule 4 to the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (SI 1999 No. 293) and so much of the information referred to in Part I of the Schedule as is reasonably required to assess the environmental effect of the works and as the promoters can reasonably be expected to compile.

1.2.6 This ES has therefore been prepared for the Crossrail project, in accordance with the requirements of Standing Order 27A and the EIA Regulations.

1.2.7 This ES describes the findings of the assessment of the likely significant environmental effects (both negative and positive) which has been undertaken for the Crossrail project on behalf of the Secretary of State. The aim of the assessment has been to:

- identify the potential environmental impacts associated with the construction and operation of Crossrail;
- identify measures to mitigate adverse significant impacts; and
- predict the magnitude and significance of any impacts which will remain.

1.2.8 The ES is a document provided for the purpose of enabling decision makers to make an assessment of the likely impacts on the environment arising from the project. The ES also provides stakeholders and the public with a basis on which to make representations to the decision makers, as appropriate, on the environmental impacts of the project. Further information on the assessment process, which led to the production of this ES, is given in Chapter 3.

1.3 The Environmental Assessment Team

1.3.1 A number of consultants were appointed by CLRLL to undertake the assessment of the various environmental effects and prepare the ES.

1.3.2 The lead environmental consultant was Environmental Resources Management (ERM), who advised on all matters pertaining to the production of the ES, assisted in managing the specialist consultants advising on impacts, compiled and edited the assessment work and acted as principal author of the ES.

1.3.3 The specialist consultants and their topic areas are listed in Table 1.1.

1 A full list of documents referred to in this chapter is given in Section 1.5.
Table 1.1 Consultants Responsible for the Assessment

<table>
<thead>
<tr>
<th>Environmental topic</th>
<th>Consultant</th>
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<tbody>
<tr>
<td>Lead environmental consultants</td>
<td>ERM</td>
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<tr>
<td>Landscape and Visual, and Lighting</td>
<td>Chris Blandford Associates, DPA Lighting and NEP Lighting Consultancy</td>
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<tr>
<td>Built Heritage</td>
<td>Alan Baxter and Associates</td>
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<td>Archaeology</td>
<td>Museum of London Archaeology Service</td>
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<tr>
<td>Ecology</td>
<td>Carter Ecological</td>
</tr>
<tr>
<td>Water Quality</td>
<td>Mott MacDonald</td>
</tr>
<tr>
<td>Traffic and Transport (construction)</td>
<td>Mott MacDonald, Scott Wilson, Faber Maunsell</td>
</tr>
<tr>
<td>Traffic and Transport (operation)</td>
<td>Halcrow and Faber Maunsell</td>
</tr>
<tr>
<td>Noise and Vibration</td>
<td>RPS</td>
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<tr>
<td>Air Quality and Climate Change</td>
<td>Mott MacDonald</td>
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<td>Contaminated Land</td>
<td>Mott MacDonald</td>
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<td>Electromagnetic Effects</td>
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<td>Socio-economics</td>
<td>Colin Buchanan and Partners</td>
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<tr>
<td>Planning</td>
<td>Drivers Jonas</td>
</tr>
<tr>
<td>Excavated Material</td>
<td>Mott MacDonald and Adams Hendry</td>
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1.4 Structure of the Environmental Statement

Introduction

1.4.1 The assessment by ERM and the specialist consultants of the significant likely environmental effects of the Crossrail project, and their findings, are described in this ES, which consists of a number of separate volumes. The contents of each of these volumes are described below.

Volume 1 - Introductory Sections

1.4.2 Following this introductory chapter, Volume 1 consists of the following:

- Chapter 2 provides an overview description of the project.
- Chapter 3 describes the assessment process and how the work was carried out.
- Chapter 4 describes the need for the project.
- Chapter 5 sets out the planning policy context for the project.
- Chapter 6 provides an outline of how the preferred project definition was chosen from the main alternatives available.
Volume 2 - Route-Wide and Central Route Section

- Chapter 7 describes the environmental impacts that are route-wide in nature or which are not specific to individual parts of the route.
- Chapter 8 considers each of the ‘route windows’ (i.e., sub-sections) within the central section of Crossrail, and describes the project in detail, the environmental baseline, the proposed mitigation measures and the predicted environmental impacts.

Volume 3 - Outer Sections

- Chapters 9 to 11 consider each of the ‘route windows’ within each of the three outer route sections and describe the project in detail, the environmental baseline, the proposed mitigation measures and the predicted environmental impacts.
- Chapter 12 addresses the potential cumulative impacts arising from the interaction of Crossrail construction with other major projects.

Volumes 4a and 4b - Project Works and Impacts Mapping

1.4.3 Volumes 4a and 4b consist of maps that illustrate:

- aspects of the environmental baseline;
- land take, worksites and impacts during construction; and
- land take, the permanent project works comprising the project and their impacts.

1.4.4 Volume 4a provides maps for the central route section, while Volume 4b provides maps for the outer route sections.
Volumes 5 to 9 - Appendices

1.4.5 Volumes 5 to 9 contain Appendices setting out relevant supporting information.

- Volume 5 sets out the requirements for the contents of an ES according to the EIA Regulations, details of the assessment methodology and provides supporting material on consultation.
- Volume 6a sets out the mitigation measures which will be used during construction and provides supporting information in relation to the specialist environmental topics addressed in the ES. Volume 6b provides mapping in support of the specialist assessment for water resources.
- Volume 7 provides illustrations of Crossrail operational structures, such as stations and shaft structures, and illustrations of possible future development over these structures (over-site development).
- Volume 8a sets out the scope, methodology and principal findings of the Transport Assessment, while Volumes 8b, 8c and 8d set out the assessment of the traffic and transport impacts, respectively, for the central, western and eastern sections of the route.
- Volumes 9a, 9b and 9c consist of an ES (prepared by WSP Environment UK) that assesses the impacts of the relocation of an external bus parking facility at Westbourne Park Bus Garage, in the borough of Westminster. These works are required as enabling works to provide a clear worksite for Crossrail works. A separate planning application has been submitted for these works, accompanied by the ES included in Volume 9, but the application has not been determined to date. Powers are therefore sought in the Bill to carry out these works in the event that the planning application is rejected.

Non-Technical Summary

1.4.6 A Non-Technical Summary, which summarises the contents of this ES, is produced as a separate, stand-alone document as required by the EIA Regulations.

1.5 References


Planning (Listed Building and Conservation Areas) Act 1990

SI 1999 No. 293, Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (‘the EIA Regulations’).