

HIGH SPEED TWO PHASE 2a INFORMATION PAPER

D12: BORROW PITS

This information paper describes need for and controls on the excavation of material from borrow pits during construction of the Proposed Scheme.

It will be of particular interest to those potentially affected by the Government's proposals for high speed rail.

This paper was prepared in relation to the promotion of the High Speed Rail (West Midlands-Crewe) Bill which is now enacted. It was finalised at Royal Assent and no further changes will be made.

If you have any queries about this paper or about how it might apply to you, please contact the HS2 Helpdesk in the first instance.

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1. Introduction

- 1.1. High Speed Two (HS2) is the Government's proposal for a new, high speed north-south railway. The proposal is being taken forward in phases: Phase One will connect London with Birmingham and the West Midlands. Phase 2a will extend the route to Crewe. Phase 2b will extend the route to Manchester, Leeds and beyond. The construction and operation of Phase One of HS2 is authorised by the High Speed Rail (London – West Midlands) Act 2017.
- 1.2. HS2 Ltd is the non-departmental public body responsible for developing and promoting these proposals. The company works to a Development Agreement made with the Secretary of State for Transport.
- 1.3. In July 2017, the Government introduced a hybrid Bill¹ to Parliament to seek powers for the construction and operation of Phase 2a of HS2 (the Proposed Scheme). The Proposed Scheme is a railway starting at Fradley at its southern end. At the northern end it connects with the West Coast Main Line (WCML) south of Crewe to allow HS2 services to join the WCML and call at Crewe Station. North of this junction with the WCML, the Proposed Scheme continues to a tunnel portal south of Crewe.
- 1.4. The work to produce the Bill includes an Environmental Impact Assessment (EIA), the results of which are reported in an Environmental Statement (ES) submitted alongside the Bill. The Secretary of State has also published draft Environmental Minimum Requirements (EMRs)², which set out the environmental and sustainability commitments that will be observed in the construction of the Proposed Scheme.
- 1.5. The Secretary of State for Transport is the Promoter of the Bill through Parliament. The Promoter will also appoint a body responsible for delivering the Proposed Scheme under the powers granted by the Bill. This body is known as the 'nominated undertaker'. The nominated undertaker will be bound by the obligations contained in the Bill and the policies established in the EMRs. There may be more than one nominated undertaker.
- 1.6. These information papers have been produced to explain the commitments made in the Bill and the EMRs and how they will be applied to the design and construction of the Proposed Scheme. They also provide information about the Proposed Scheme itself, the powers contained in the Bill and how particular decisions about the Proposed Scheme have been reached.

¹ The High Speed Rail (West Midlands – Crewe) Bill, hereafter 'the Bill'.

² For more information on the EMRs, please see Information Paper E1: Control of Environmental Impacts.

2. Overview

- 2.1. This information paper describes the case for borrow pits on the Proposed Scheme, their location and use, controls on the excavation of material from borrow pits under the Bill, and their restoration.
- 2.2. A borrow pit is an area where material, such as sand and gravel, is excavated for use in the construction of a nearby infrastructure project. Each site will be restored its existing ground level.

3. The case for borrow pits

- 3.1. The Proposed Scheme will require high quality aggregate (usually comprising sand and gravel) to construct railway embankments. Normally, this material will be won from the construction of railway cuttings. However, at some locations along the Proposed Scheme, there is anticipated to be a shortfall of this high quality material necessary for construction.
- 3.2. Options that have been considered to address this shortfall include using clay extracted during the construction of the Proposed Scheme, which is unlikely to be of appropriate quality on its own, stabilising it with cement or lime; using high quality aggregate imported from commercial quarries; and/or excavating appropriate high quality material from borrow pits in areas close to the route of the Proposed Scheme.
- 3.3. Excavating borrow pits will enable high quality aggregate to be extracted and processed locally and transported largely on site haul routes within the construction area of the Proposed Scheme. This will generate fewer HGV movements than importing the material from commercial quarries, reducing impacts on the local road network and communities.
- 3.4. Following their use, the borrow pits created during excavation can then be backfilled with materials generated from the construction of the Proposed Scheme. This presents a more sustainable option, reducing the need to move this material off-site, further helping to limit impacts on the local road network and communities.
- 3.5. For these reasons, borrow pits have been taken forward as the preferred option for the Proposed Scheme.

4. Borrow pits and the Proposed Scheme

- 4.1. Six sites in close proximity to the route of the Proposed Scheme are predicted to contain sufficient granular material of an appropriate quality, and have therefore been proposed for use as borrow pits. The land required for the proposed borrow pits is, for the most part, currently in agricultural use. The land has also been identified by the local authorities as part of their forward planning for mineral extraction.

- 4.1. These borrow pits will be excavated over a maximum period of four years, which will include their excavation and backfilling, to be followed by a period of restoration activity. The general process for excavating, backfilling and restoring borrow pits is set out in Volume 1 of the ES³.
- 4.2. The proposed borrow pit locations are presented in Table 1 below.

Table 1. Borrow pits locations on the Proposed Scheme

Borrow pit location	Community area (CA)
Kings Bromley South, located either side of Crawley Lane and to the south of Ashby Sitch, both sides of the Proposed Scheme	Fradley to Colton (CA1)
Kings Bromley North, located adjacent to the realigned A515 Lichfield Road	Fradley to Colton (CA1)
Kings Bromley North, located adjacent to the realigned Shaw Lane	Fradley to Colton (CA1)
Blithbury, located to the north of the River Trent viaduct	Fradley to Colton (CA1)
Netherset Hey, located to the north of the River Lea viaduct	Whitmore Heath to Madeley (CA4)
North of Checkley Lane	South Cheshire (CA5)

- 4.3. Further details regarding borrow pits and the depth of excavation are presented in the ES within the relevant Volume 2 Community Area reports and map books⁴.

5. Environmental controls

- 5.1. The nominated undertaker will require its contractors to apply, and to comply with, the requirements of the Code of Construction Practice (CoCP) and will ensure the use of best practicable means to reduce the effect of the borrow pits on the local environment.
- 5.2. The nominated undertaker and its contractors will comply with the EMRs which will set out commitments to mitigate the environmental impact of the Proposed Scheme. These sit alongside the environmental controls contained in the Bill, see Information Paper E1: Control of Environmental Impacts. These controls will form part of the Local Environment Management Plan (LEMP), which will be prepared in accordance with the CoCP. The nominated undertaker and its contractors will also each prepare and operate a Environmental Management System in accordance with BS EN ISO 14001 appropriate to the scale and nature of the construction works

³ This can be found here: <https://www.gov.uk/government/collections/hs2-phase-2a-environmental-statement>

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- 5.3. Paragraph 7 of Schedule 17 (Planning Conditions) to the Bill requires the nominated undertaker to obtain approval from the relevant planning authority, where they are a qualifying authority, for plans or specifications for the excavation of bulk materials from borrow pits. Further information on the role of qualifying authorities and non-qualifying authorities can be found in Information Paper B2: Main provisions of the planning regime.
- 5.4. The grounds on which the relevant planning authority can refuse approval or impose conditions relate to the design or external appearance of the borrow pits, the methods by which they are worked and arrangements as to noise, dust, vibration or screening during their operation. In addition, where the site is not within the limits of deviation or specifically identified in Schedule 6 to the Bill, the grounds may relate to the location of the site.
- 5.5. Requests for approval under the Planning Conditions Schedule will address the matters relevant to the authority's decision.
- 5.6. For dust control the submission will have regard to the Institute of Air Quality Management mineral guidance.
- 5.7. Schedule 32 to the Bill sets out the requirement for approval from the relevant body (either the Environment Agency or Lead Local Flood Authority), for works such as water abstraction and discharges, which may affect the water environment. Such works, which could affect the water environment, cannot commence until the relevant body is satisfied that any impacts are properly understood and that any necessary mitigation and monitoring has been adopted. For more information see Information Paper E15: Water Resources, Flood Risk and Authorisation of Related Works.

6. Detailed Design

- 6.1. The depth of excavation that was used to inform the Environmental Statement, was based on assumptions set out within the relevant Volume 2 Community Area reports and map books.
- 6.2. As information becomes available from ground investigations, this assessment will be reviewed and the volumes of material anticipated to be acceptable or unacceptable as granular fill will be adjusted accordingly. These adjustments have the potential to influence the extent of the land to be used for the extraction of material within the six areas proposed as borrow pits.

7. Restoration

- 7.1. The Borrow Pits Restoration Strategy, which forms part of the Environmental Statement, establishes the principles for the restoration of the sites.
- 7.2. A key principle is to use cohesive material (for example silt and clay) from the excavation of the Proposed Scheme as backfill to restore the borrow pits to original ground levels and to a condition suitable for their previous land use.

- 7.3. In accordance with paragraph 8 of Schedule 17 to the Bill, if the relevant planning authority is a qualifying authority, the excavation of bulk materials from borrow pits cannot commence unless the authority has approved a scheme for the restoration of the borrow pit site.
- 7.4. The relevant planning authority can only refuse to approve or impose conditions on the approval of a restoration scheme on the ground that the scheme ought to be modified and is reasonably capable of being modified.
- 7.5. Paragraph 8(4) of Schedule 17 to the Bill requires the nominated undertaker to carry out the approved scheme once it has completed its use of the land for the excavation of bulk materials from the borrow pit.

8. More information

- 8.1. The Borrow Pit Restoration Strategy is available as part of the Environmental Statement Volume 5: Technical appendices (CT-009-000). This can be found here: <https://www.gov.uk/government/collections/hs2-phase-2a-environmental-statement>
- 8.2. More detail on the Bill and related documents can be found at: www.gov.uk/HS2